***Environmental Protection Act 1994***

**Approved form for submission of a draft terms of reference**

*This is the approved form for proponents to submit a draft terms of reference under section 41 of the Environmental Protection Act for projects undergoing assessment by environmental impact statement.*

Draft terms of reference for an
environmental impact statement under the
*Environmental Protection Act 1994*

<insert project name>
proposed by <insert Proponent>
<Month Year>

Prepared by: ***<insert proponent’s name i.e. the registered legal entity intending to carry out the activity and in whose name the applicable permits or licences are to be issued>***

Completed in the approved form <*insert document number e.g. ESR/2017/4038*>, version <*insert version number e.g. 3.01*>, <insert month and year> prepared by the Department of Environment and Science for projects undergoing assessment by environmental impact statement under chapter 3, part 1, of the *Environmental Protection Act 1994*.

<month year>

# *Instructions for using this document*

*[Delete all red text in this document before submitting the draft TOR]*

***Prior to completing this document***

*Prior to submitting the draft TOR, you are encouraged to request a pre-lodgement meeting with the department. Further information on pre-lodgement discussions is available on the department’s website. To request a meeting with the department please lodge the Application for pre-lodgement services form (ESR/2015/1664).*

***Purpose***

*This document is the approved form for submitting a draft terms of reference (TOR) to the Department of Environment and Science (the department) under section 41 of the Environmental Protection Act 1994 (*EP Act*). It is relevant to proposed projects undergoing assessment by environmental impact statement (*EIS*) under the Environmental Protection Act.* *Refer to* *the department’s guideline* [The environmental impact statement process for resource projects under the](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/does-my-project-need-an-eis) *[Environmental Protection Act 1994](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/does-my-project-need-an-eis) (ESR/2016/2167)* *for further information on the EIS process under the Environmental Protection Act.*

***Instructions***

*Black coloured text in this document provides the approved form, text and headings to be used to submit a project-specific draft TOR. Red-italicised text provide instructions for amending the form to prepare a project-specific draft TOR for submission to the department.*

*To complete the form:*

* *amend the text in accordance with the instructions in the red-italicised text. For example, insert the location and scope of the project and remove irrelevant information such as coal seam gas requirements for a mining project.*
* *do not change the black text. If you consider changes are warranted, provide justification as a comment in track changes*
* *identify changes to the approved form by tracking changes*
* *remove all red italicised text prior to submission to the department.*

***Submitting the draft TOR and fee***

*The EIS process under the Environmental Protection Act begins when you submit a project-specific draft TOR to the department and pay the fee. Submit the project-specific draft TOR to the department via email to the Environmental Impact Assessment team* *eis@des.qld.gov.au**. Information on* [*EIS fees*](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/fees) *is described in EIS process section of the Queensland Government website. Please contact the Environmental Impact Assessment team* *eis@des.qld.gov.au*to request procedures for paying fees.

*A****fter the draft TOR is submitted***

*If the department considers the draft TOR is consistent with the approved form, the draft TOR is made available to all stakeholders, including government agencies and the public, for a minimum of 30 business days. Stakeholders can review the draft TOR and make written comments.*

*After public consultation, the department will consider stakeholder comments and finalise the TOR. You then have two years to submit an EIS which addresses the final TOR.*

The Department of Environment and Science

GPO Box 2454, Brisbane Qld 4001

Email: eis@des.qld.gov.au

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# Purpose of the draft TOR

* 1. Introduction

This document is the draft terms of reference (TOR) for the proposed *<insert project name>* (herein referred to as ‘the proposed project’) proposed by *<insert proponent>* being assessed under the environmental impact statement (EIS) process in chapter 3, part 1, of the Environmental Protection Act. It describes the scope and content that the EIS must include to allow the purposes of the EIS and EIS process, as defined in the Environmental Protection Act, to be achieved for the proposed project (section 40 of the Environmental Protection Act).

In summary, the purposes of an EIS and the EIS process are:

* to assess:
	+ the potential adverse and beneficial environmental, economic and social impacts of the project
	+ management, monitoring, planning and other measures proposed to minimise any adverse environmental impacts of the project
* to consider feasible alternative ways to carry out the project
* to give enough information to the proponent, Commonwealth and State authorities and the public to prepare an environmental management plan for the project
* to help the department decide an environmental authority application for which the EIS is required
* to give information to other Commonwealth and State authorities to help them make informed decisions
* to meet any assessment requirements under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for <insert either a controlled action or a bilateral agreement>.
* to allow the department to meet its obligations under a bilateral agreement.

The EIS must address key requirements outlined in the Environmental Protection Act and subordinate legislation, including:

* the requirements of section 40 of the Environmental Protection Act, which specifies the purpose of an EIS and of the EIS process
* the requirements of sections 125, 126 and 126A which set out the general information requirements for applications for an environmental authority (EA)
* the requirements of sections 126B, 126C and 126D which set out the information requirements for a proposed progressive rehabilitation and closure (PRC) plan for mining projects
* the requirements of chapter 2 and schedule 1 of the Environmental Protection Regulation 2019, including matters to be addressed by assessment under the bilateral agreement between the Australian Government and the State of Queensland
* the environmental objectives and performance outcomes specified in schedule 8 of the Environmental Protection Regulation.

It is important that the EIS provides all the information needed to enable the issuing of an EA (and PRC plan schedule for mining projects) for the proposed project as set out in these TOR in conjunction with latest version of the Department of Environment and Science’s (herein referred to as ‘the department’) [EIS information guidelines](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (DES 2020, 2022). This is because section 139 of the Environmental Protection Act states that the information stage of the EA application and PRC plan does not apply if the EIS process is complete, unless there has been a subsequent change to the proposed project including changes to a proposed PRC plan (where relevant).

While every attempt is made by the department to ensure the final TOR requires an assessment of all relevant matters, the final TOR may not be exhaustive. Therefore, the EIS must address other matters not covered in the final TOR in the following circumstances:

* Studies reveal a matter that had not been foreseen when the TOR was finalised.
* An issue not identified previously is considered contentious by the public, such as a public perception of potential environmental harm or nuisance even though the perception might be mistaken.
* The department directs the proponent in writing to address a matter as an information request under section 62 of the Environmental Protection Act.
* New or amended legislation or policies come into effect after the TOR has been finalised, regardless of whether or not the legislation or policies have been listed in the TOR. Transitional arrangements or exemptions may apply for individual projects.
* The proponent makes amendments to the proposed project that would result in a change in the nature, timing or location of any impacts.
	1. Information about the proposed project and assessment
		1. Project proponent

*Insert details of the proponent(s) of the proposed project, including* *details of any joint venture partners, and their address(es).*

*Note: A proponent is the person(s) or registered legal entity(s) (not business trading name) intending to carry out the activity and in whose name the applicable permits or licences are to be issued. The full registered name is required.*

* + 1. Proposed project description

*Describe and illustrate the scope of the proposed project to be assessed by the EIS. The description must include:*

* *the name of the proposed project*
* *a short summary on the key elements of the proposed project based on the initial advice statement, including the amount of resources to be mined or extracted, how the resources will be mined or extracted, and any separation, beneficiation or processing of the mineral or gas that will occur*
* *any major infrastructure requirements*
* *the operational land*
* *location*
* *size and type of resource activity*
* *if any mining/petroleum tenements are granted or applied for relevant to the proposed project*
* *any cadastral information for off-lease activities*
* *land access for the purposes of the EIS*
* *power and water supply*
* *accommodation and transport (state if there are any options for these components)*
* *scaled maps and schematic diagrams that illustrate the following matters for all significant stages of the proposed project: the site location; all excavations; all spoil and waste dumps; stockpiles of soil or mined material; processes; plant; buildings; infrastructure; transport corridors; watercourses and other drainage lines; dams for water or tailings; water management systems; voids; rehabilitation; and any another relevant activity.*
	+ 1. EIS assessment process

*Insert a short summary of the Environmental Protection Act process that is being, and will be, followed to obtain an EA (and PRCP schedule where relevant) for the proposed project. Provide dates of completed milestones and likely dates for future milestones. The intent is to inform stakeholders and the public of the process per the approved text for each process below.*

***For site-specific EA applications insert the following text (delete if not relevant):***

*<Insert proponent>* applied for a site-specific EA (*<insert EA number>*) and PRC plan (delete if not relevant) for *<insert resource>*. On *<insert date>,* the department notified *<insert proponent>* that the application requires assessment by EIS. Under section 139 of the Environmental Protection Act, the EIS for the *<project name>* will form the application documents for the requirements of chapter 3 of the Environmental Protection Act.

***For EA amendment applications insert the following text (delete if not relevant):***

*<Insert proponent>* applied for an amendment to an existing EA (<insert EA number>) and PRC plan (delete if not relevant) for *<insert resource project name>*. The department decided that the proposed amendment is a major amendment under sections 228 and 229 of the Environmental Protection Act. On *<insert date>*, the department notified *<insert proponent>* that the amendment application requires assessment by EIS. Under section 139 of the Environmental Protection Act, the EIS for the *<project name>* will form the application documents for the requirements of chapter 3 of the Environmental Protection Act.

***For voluntary EIS applications (delete if not relevant)***

On *<insert date>*the department approved an application for *<insert proponent>* to voluntarily prepare an EIS under the Environmental Protection Act for the *<insert project name>*. Under section 139 of the Environmental Protection Act, the EIS will form the application documents for the requirements of chapter 3 of the Environmental Protection Act.

This is provided that the environmental risks of the activity or way the activity will be carried out, including any proposed PRC plan, do not change between the EIS being completed under the Environmental Protection Act and when the EA and PRC plan *[delete if not relevant]* applications were made.

***The following section is for proposed projects assessed under the bilateral agreement (delete it if it is not relevant):***

The proposed project was determined to be a controlled action (EPBC/*<insert number>*)under the EPBC Act (Cth). The controlling provisions are *<insert all relevant controlling provisions e.g. sections 12 and 15A (World Heritage properties), 15B and 15C (National Heritage places), 18 and 18A (listed threatened species and communities), 20 and 20A (listed migratory species), Great Barrier Reef Marine Park (sections 24B and 24C) and 24D and 24E and 23 and 24A (Commonwealth marine area) and, 24D and 24E (A water resource, in relation to coal seam gas development and large coal mining development)>*.

The EIS for the proposed project will be jointly assessed under the Environmental Protection Act and the Commonwealth’s EPBC Act using the EIS process under the Environmental Protection Act in accordance with the assessment bilateral agreement between the Australian Government and the State of Queensland.

Further information on the EIS process under the Environmental Protection Act is described in the department’s guideline [The environmental impact statement process for resource projects under the *Environmental Protection Act 1994*](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/does-my-project-need-an-eis)(ESR/2016/2167)*.*

1. Content requirements of the EIS

The remaining sections outline the information requirements of an EIS under the Environmental Protection Act for the proposed *<insert project name>*. It is not necessary for the EIS to follow the structure outlined below, but the relevant requirements for each section must be included in the EIS.

1. Glossary

Provide a glossary of terms and a list of acronyms and abbreviations at the start of the EIS.

1. Executive summary

The EIS must include an executive summary which describes the proposed project and conveys the most important aspects and environmental management commitments relating to the proposed project in a concise and readable form.

1. Introduction

The introduction of the EIS must clearly explain the function of the EIS, why it has been prepared and what it sets out to achieve. It must include an overview of the structure of the document.

* 1. Project proponent

Provide information about the proponent(s) and their business, including:

* the proponent’s full name, street and postal address, and Australian Business Number, including details of any joint venture partners
* the nature and extent of the proponent’s business activities and experience in resource projects
* proponent’s environmental record, including a list of any breach of, or proceedings against the proponent(s) under, a law of the Commonwealth or a State for the protection of the environment or the conservation and sustainable use of natural resources (an environmental law)
* the proponent’s environmental, health, safety and community policies.
	1. The environmental impact statement process

Outline the steps of the EIS process, noting any completed milestones, and an estimated completion date for each remaining EIS stage. Highlight the steps in which the public will have the opportunity to provide input or comment. This information is required to ensure readers are informed of the EIS process and are aware of their opportunities for input and commenting.

Inform the reader how and when properly made public submissions on the EIS can be made, and outline how the submissions are taken into account in the decision-making process.

* 1. Project approvals process

Describe all approvals under federal, state or local legislation that are required to enable the proposed project to be constructed and operated, and note the legislation under which the approvals are assessed and issued. This information must explain how the EIS fits into the assessment and approval processes for the EA and other approvals required of the proposed project before construction and operations can start. If there are any relevant government policies or legislation with which the proposed project is inconsistent, these must be identified in this section.

*[delete if not applicable]* As this proposed project is to be assessed under the bilateral agreement between the Australian Government and the State of Queensland, describe the approvals process under the EPBC Act.

1. Consultation process

*The EIS process must include an appropriate public consultation program. The proponent should consult with local, Queensland and Australian government authorities, and potentially affected local communities. The consultation plan must be consistent with, and complement, the notification requirements of the EIS process. The extent to which a proponent consults with relevant persons and organisations is to be proportional to the public interest and significance of the proposed project’s potential environmental, social and economic impacts. Early and sustained consultation with all relevant stakeholders is recommended.*

Describe the consultation that has taken place and how responses from stakeholders, including government agencies and members of the community, have been incorporated into the design and outcomes of the proposed project.

Describe any proposed future consultation activities, and outline how the results of that consultation will be used in the ongoing management of the proposed project. Provide information on the development and outcomes of the implementation of consultation for the people, organisations and communities identified as affected or interested persons and stakeholders for the proposed project. Describe issues of potential concern to all stakeholders at various stages of the proposed project from project planning to commencement, project construction, operations and decommissioning. The description of the consultation must address the following matters:

* the objectives of the consultation process
* timing of consultation
* the number and interests of the people, organisations and communities involved in the consultation (particularly the affected and interested persons defined in sections 38 and 41 of the Environmental Protection Act)
* methods of consultation and communication
* consultation process reporting and feedback methods
* an assessment explaining how the consultation objectives have been met
* an analysis of the issues and views raised and their completed or planned resolution, including any alterations to the proposed project as a result of feedback received.
1. Proposed project description and alternatives

Describe all aspects of the proposed project that are covered by the EIS’s assessment. If there are any aspects of the proposed project that would be assessed separately, describe what they are, and how they would be assessed and approved. If the proposed project is an expansion of an existing activity, clearly state the linkages, overlap and separation between them.

The project description must include all on and off lease activities relevant to the proposed project including construction, operation and decommissioning activities. If the delivery of the proposed project is to be staged, describe the nature and timing of the stages.

* 1. Proposed project

Describe and illustrate the following specific information about the proposed project:

* proposed project title
* proposed project objectives
* expected capital expenditure
* rationale for the proposed project
* background to the project’s development and justification for its need
* proposed project description, including the nature and scale of all project components and activities
* whether it is a greenfield or brownfield site
* power and water supply
* transport requirements
* regional and local context of the proposed project’s footprint, including maps at suitable scales
* proposed timing of the development, including construction staging, likely schedule of works and anticipated mine life *[delete if not relevant]*
* relationship to other major projects, developments or actions of which the proponent is reasonably aware
* the workforce numbers for all project phases
* where personnel would be accommodated and the likely recruitment and rostering arrangements to be adopted
* proposed travel arrangements of the workforce to and from work, including use of a fly-in-fly-out (FIFO) workforce.
	1. Site description

Provide real property descriptions of the proposed project land and adjacent properties, any easements, any existing underlying resource tenures, and identification number of any resource activity lease for the proposed project land that is subject to the application.

Describe and illustrate with scaled maps the key infrastructure in and around the site, including state-controlled and local roads, rail lines and loading yards, airfields, ports or jetties, electricity transmission infrastructure, pipelines, and any other infrastructure in the region relevant to the proposed project.

Describe and illustrate the topography of the proposed project site and surrounding area; highlight and identify any significant features shown on the maps. Map the location and boundaries of the proposed project’s footprint including all infrastructure elements and development necessary for the proposed project. Show all key aspects including excavations, stockpiles, areas of fill, subsidence areas, services infrastructure, plant locations, water or tailings storages, buildings, bridges and culvert, haul and access roads, causeways, stockpile areas, barge loading facilities and any areas of dredging or bed levelling. Include discussion of any environmental design features of these facilities including bunding of storage facilities.

Describe and map the spatial distribution and cross-sections of geological and terrestrial and/or coastal landforms of the proposed project area in a suitable electronic format. Provide detailed spatial information in a suitable electronic format, that clearly shows the boundaries of water catchments that are significant for the drainage of the project site, including the location of waterways as defined under the *Fisheries Act 1994*. Provide detailed spatial information in a suitable electronic format that clearly shows geological structures, such as aquifers, faults and economic resources that could have an influence on, or be influenced by, the proposed project’s activities.

Describe and illustrate the precise location of the proposed project in relation to any designated and protected areas and waterbodies. This is to include the location of any proposed buffers surrounding the working areas and lands identified for conservation, either through retention in their current natural state or to be rehabilitated.

Describe, map and illustrate land and soil resources (types and profiles) of the proposed project area at a scale relevant to the site and in accordance with relevant guidelines. Identify soils that would require particular management due to wetness, erosivity, depth, acidity, salinity or other feature, including acid sulfate soils.

Describe with concept and layout plans, in both plan- and cross-section views, requirements for constructing, upgrading or relocating all infrastructure associated with the proposed project. Show the locations of any necessary infrastructure easements on the plans, including infrastructure such as roads, rail (and the rail corridor), level crossings, conveyors, bridges, jetties, ferries, tracks and pathways, dams and weirs, bore fields, power lines and other cables, wireless technology (such as microwave telecommunications), and pipelines for any services, whether underground or above.

* 1. Siting and management of coal seam gas activities

*[This section is only for proposed CSG projects—delete it if it is not relevant]*

The EIS must provide as much information as possible on what is planned for the coal seam gas (CSG) development. The department recognises that due to the nature of CSG developments, it might not be possible for the EIS to describe and address the exact location of all wells, pipelines and other associated infrastructure throughout the life of the proposed project. Nevertheless, to the greatest extent possible, the EIS must provide the following information on the locations and methodology that will be used to site proposed project facilities:

* the conceptual framework that describes how wells, gathering systems and production facilities would be arranged to produce gas
* preliminary field development plans (based on concept engineering design) that identify priority areas for development and detail on how development may be undertaken
* how environmental, landholder and cultural heritage preliminary constraints analysis guides the front-end engineering design process
* how foreseeable or likely actions related to the construction and operation of the proposed project may impact on environmental values
* how the identified potential impacts of the proposed project would be considered in final project design and layout including how this process would facilitate avoiding and minimising adverse impacts.

Provide maps showing the results of the constraints analysis at scales that allow stakeholders to appreciate both the wider scale of the development and how their own interests (e.g. their landholdings) might be affected.

Provide details of the environmental, social and economic values and factors used in the constraints analysis. If an environmental value has not been used in the constraints analysis, describe the reasons for its exclusion.

Provide details about the accuracy of information, criteria and methodology used in the constraints analysis and decision making for siting facilities. Assess the limitations and caveats that apply to interpretation of the analysis.

Describe the process for updating the constraints analysis to incorporate the results of any subsequent field surveys and any revised Queensland and Australian government datasets.

Describe how any stakeholders who may be affected by changes to siting constraints would be informed of the changes.

* 1. Proposed construction and operations

Where applicable, describe the following information about the proposed project, including maps and concept, design and layout plans as relevant for the following:

* existing land uses and any previous land use that might have affected or contaminated the land
* existing buildings, infrastructure and easements on the potentially affected land
* the precise location of works to be undertaken, structures to be built or components of the proposed project
* all pre-construction activities (including vegetation clearing, site access, interference with watercourses, wetlands and floodplain areas)
* the proposed construction methods, associated equipment and techniques
* *[this dot point is only for proposed CSG projects—delete it if it is not relevant]* detail how the chosen extraction and processing methods will optimise utilisation of the CSG resource and prevent waste of the extracted CSG
* road and rail infrastructure, and stock routes, including new constructions, closures and/or realignments
* the location, design and capacity of all other required supporting infrastructure, including water supply and storage, sewerage, electricity from the grid, generators and fuels (whether gas, liquid and/or solid), power stations, renewable energy and telecommunications
* changes to watercourses, flooding and overland flow on or off the site, including water diversions, crossings, flood levees, water off-takes, and locations of any proposed water discharge points
* any take of surface and groundwater (both direct and in-direct)
* proposed tailings management and storage
* any infrastructure alternatives, justified in terms of ecologically sustainable development (including energy and water conservation)
* days and hours of construction and operation
* proposed mine life, amount of resources to be mined and the resource base including total seam thickness and seam depths
* mining sequence and cross sections showing profiles and geological strata and faults
* the planned recovery of resources including the location of any resources not intended to be mined that may be sterilised during mining activity or from related infrastructure
* the proposed methods, equipment and techniques for resource separation, beneficiation and processing
* the sequencing and staging of activities
* the proposed methods and facilities to be used for the storage, processing, transfer, and loading of product
* the capacity of high-impact plant and equipment, their chemical and physical processes, and chemicals or hazardous materials to be used
* any activity that would otherwise be a prescribed environmentally relevant activity if it were not undertaken on a mining or petroleum lease
* any new borrow pits, stream bed excavations, or expanded dredging, bed levelling, quarry and screening operations that may be required to service construction or operation of the proposed project.
	1. Feasible alternatives

Present feasible alternatives for the proposed project. Address a range of alternatives including conceptual, technological, locality, configuration, scale and individual elements or components that may improve environmental outcomes as well as the alternative of not proceeding with the proposed project.

Describe and evaluate the comparative environmental, social, and economic impacts of each alternative (including the option of not proceeding), with particular regard to the principles of ecologically sustainable development.

Discuss each alternative and its potential impacts in sufficient detail to enable an understanding of the reasons for preferring certain options and courses of action while rejecting others. Justify why the proposed project and preferred options should proceed.

1. The environmental impact assessment process

For each project specific matter outlined in section 9, the EIS must identify and describe the relevant environmental values, assess potential adverse and beneficial environmental, economic and social impacts of the proposed project; and outline the management, monitoring, planning and other measures proposed to avoid, minimise and/or mitigate any adverse environmental impacts of the proposed project. This must be addressed within the scope of the following requirements.

* 1. Environmental values

For the purposes of the EIS process, ‘environment’ is defined in section 8 of the Environmental Protection Act.

Identify and describe the values that must be protected for all the relevant matters including:

* environmental values specified in the Environmental Protection Act, the Environmental Protection Regulation (e.g. environmental objectives and performance outcomes as defined in schedule 8), environmental protection policies and associated guidelines
* values under other State legislation, policies and guidelines including the *Vegetation Management Act 1999*, the *Nature Conservation Act 1992*, the *Regional Planning Interests Act 2014*
* values identified in the project specific matters in section 9.

Consider all available baseline information relevant to the environmental risks of the proposed project, including seasonal and long term variations. Describe the quality of all information, in particular the source of the information, how recent the information is, how the reliability of the information was tested, and any assumptions and uncertainties in the information.

* 1. Impact assessment

Assess the impacts of the proposed project on environmental values. This includes demonstrating that the proposed project meets the environmental objectives and outcomes for each matter in section 9 and the environmental objectives and performance outcomes for any matters listed in Schedule 8 of the Environmental Protection Regulation.

Impact assessment must address:

* short-, medium- and long-term scenarios
* the scale of an impact, including:
	+ the impact’s intensity and duration
	+ cumulative effects of the proposed project in combination with other major projects or developments of which the proponent is reasonably aware
	+ the risk of environmental harm
	+ avoidance, mitigation and management strategies and if necessary, offsets provisions
	+ the potential for unforeseen impacts
	+ the risks associated with unlikely but potentially major impacts
	+ direct, indirect, secondary, permanent, temporary, unknown, unpredictable and/or irreversible impacts
	+ both positive and negative impacts
	+ impact interactions.
	1. Cumulative impacts

Assess the cumulative impacts of the proposed project on environmental values. Every effort must be made to find information from all sources relevant to the assessment of cumulative impacts including other major projects or developments of which the proponent is reasonably aware. The EIS must outline ways in which the cumulative impact assessment and management could subsequently be progressed further on a collective basis.

Impact assessment must address cumulative impacts, including:

* impacts to environmental values of land, air and water, public health and the health of terrestrial and aquatic ecosystems
* impacts to environmental values over time or in combination with other impacts in the dimensions of scale, intensity, duration or frequency of the impacts
* impacts created by the activities on other adjacent, upstream and downstream developments and infrastructure, and landholders
* impact of proposed project on overall state and national greenhouse gas (GHG) inventories and targets.
	1. Avoidance and mitigation

Propose and describe avoidance, mitigation and management strategies for the protection or enhancement of identified environmental values. Proposed strategies must:

* adhere to the department’s management hierarchy: (a) to avoid; (b) to minimise and mitigate including best practice environmental management; once (a) and (b) have been applied, (c) if necessary and possible, to offset
* include an assessment of the expected or predicted effectiveness, of the mitigation measures for dealing with the proposed project’s relevant impacts
* the name of the entity responsible for endorsing or approving each mitigation measure or monitoring program
* any statutory or policy basis for the mitigation measures
* the cost of the mitigation measures
* include an environmental management plan setting out the framework for continuing management, mitigation and monitoring programs for the project’s relevant impacts, including any provision for independent environmental auditing
* include an adaptive management approach to provide confidence that, based on current technologies, the impacts can be effectively managed over the long-term
* be described in context of the department’s model conditions and/or site-specific, outcome-focussed conditions that can be measured and audited.

For unproven elements of a resource extraction or processing process, technology or activity, identify and describe any global leading practice environmental management that would apply.

Demonstrate that the design of the proposed project and its predicted outcomes:

* meet the environmental objectives and outcomes listed in section 9 for each matter and the performance outcomes stated in Schedule 8 of the Environmental Protection Regulation
* address the matters outlined in Schedule 1 of the Environmental Protection Regulation (including items 2 and 4)
* are consistent with the state and national emissions reduction targets, including to power Queensland with 50% renewable energy by 2030, reduce emissions by 30% below 2005 levels by 2030 and achieve net zero greenhouse gas emissions by 2050
* are consistent with best practice environmental management during construction, operation, and decommissioning of the proposed project
* meet all statutory and regulatory requirements of the federal, state and local government, including any relevant plans, strategies, policies and guidelines.
	1. Conditions and commitments

Provide sufficient evidence and detail through studies, proposed management measures, commitments and supporting information:

* to demonstrate that the predicted outcomes for the proposed project can be achieved
* to meet the requirements of sections 125, 126 *<for proposed CSG projects>*,126A of the Environmental Protection Act and 126B–126D *<for proposed mining projects>*
* to meet the requirements of Schedule 1 of the Environmental Protection Regulation
* for the administering authority to make recommendations about the suitability of the proposed project, assess whether an approval be granted and recommend draft conditions for inclusion on relevant approvals
* to allow the administering authority to develop a register of commitments, and how those commitments will be achieved during the development and operation of the proposed project.
	1. Information sources

For information included in the EIS, provide the following: the source of the information, how recent the information is, how the reliability of the information was tested and any uncertainties in the information.

* 1. Critical matters
		1. Definition of critical matters

The detail in which the EIS deals with all matters relevant to the proposed project must be proportional to the scale of the impacts on environmental values. When determining the scale of an impact, consider the impact’s intensity, duration, cumulative effect, irreversibility, the risk of environmental harm, management strategies and offset provisions.

A critical matter is a project specific matter listed in section 9 that has one or more of the following characteristics:

* It has a high or medium probability of causing serious or material environmental harm, or a high probability of causing an environmental nuisance.
* It is considered important by the administering authority, and/or there is a public perception that an activity has the potential to cause serious or material environmental harm or an environmental nuisance, or the activity has been the subject of extensive media coverage.
* It is relevant to a controlling provision under the EPBC Act.
* It raises obligations under any other legislation applicable for the proposed project (e.g. *Water Act 2000*).

The final scope of critical matters will be determined by the administering authority when finalising the TOR. However, if a new additional critical matter becomes apparent after the final TOR are issued, the EIS must address that new matter.

* + 1. Critical environmental matters for this project

Critical environmental matters identified for this proposed project which the EIS must give priority are:

* *<Insert list of ‘critical matters’ for the proposed project based on the above definition e.g. land, water quality, matters of national environmental significance, matters of state environmental significance>*
1. Project specific matters
	1. Climate

Conduct the assessment in accordance with the latest version of the department’s[Climate—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (DES 2020)*.*

Describe the proposed project area’s climate patterns that are relevant to the environmental impact assessment, particularly the proposed project’s discharges to water and air, and propagation of noise. Provide climate data in a statistical form including long-term averages and extreme values.

Assess the proposed project’s vulnerabilities to projected climate change (e.g. changing patterns of temperature, rainfall, hydrology, and extreme weather events). In the assessment of climate hazards and risks, reference relevant climate projection data and employ appropriate risk assessment methodologies.

Describe the adaptation strategies and/or activities designed to minimise climate change impacts to the proposed project, subsequent land uses on that site (e.g. rehabilitation projects) and surrounding land uses. Adaptation activities must be designed to avoid perverse outcomes, such as increased emissions of greenhouse gases or maladaptive outcomes for surrounding land uses.

Provide an inventory of projected annual Scope 1 and Scope 2 emissions for each GHG over the life of the project. Estimate both unmitigated emissions and predicted emissions after all avoidance and mitigation measures have been accounted. Describe the methods used to make the estimates. Provide an estimate of annual Scope 3 GHG emissions for the life of the project.

Assess the potential impacts of the proposed project on the state and national GHG inventories including Queensland’s emissions targets i.e. 50% renewable energy target by 2030, 30% emissions reduction below 2005 level by 2030 and zero net emissions by 2050.

Demonstrate and outline in a Decarbonisation Plan in the EIS how the project will assist in meeting Queensland’s 2030 emissions reduction target and to achieve net zero emissions by 2050.

Address the following matters in the Decarbonisation Plan for the life of the project; with key targets, commitment to measures and transparent reporting of progress:

* Quantify, describe and illustrate the project’s contribution toward Queensland's emissions reduction and renewable energy targets:
	+ 30% on 2005 levels by 2030
	+ 50% renewable energy by 2030
	+ zero net emissions economy by 2050.
* Explain feasible alternatives that were considered to avoid or reduce the project’s emissions as well as the alternative of not proceeding with the proposed project. Address conceptual, technological, locality, configuration, scale and individual elements or components.
* Describe:
	+ measures (preferred and alternatives) proposed to avoid and/or minimise Scope 1 and Scope 2 GHG emissions of the proposed project
	+ options for avoiding and/or mitigating Scope 3 emissions (e.g. working with supply chain and customers).
* Include:
	+ opportunities and commitments for offsetting GHG emissions through accredited and verified offsets that represent genuine emissions reductions within Australia (i.e. will be recognised in the National Greenhouse Accounts)
	+ opportunities to reduce greenhouse emissions through renewable energy use and innovation
	+ any voluntary initiatives, such as projects undertaken as a component of the national Greenhouse Challenge Plus program, or research into reducing the lifecycle and embodied energy carbon intensity of the proposed project’s processes or products
	+ any additional carbon offsetting options for emissions that cannot be reduced (including, but not limited to, through carbon offsets, vegetation management).
* Quantify the emissions expected to be abated for each avoidance and mitigation measure.
* Compare preferred measures for emission controls and energy consumption with best practice International environmental management in the relevant industry sector.
* Describe the practicality, effectiveness and risks for each avoidance and mitigation measure.
* Demonstrate that measures have been factored into the economic feasibility of the project.
* Describe and commit to:
	+ periodic energy audits that measure progress towards improving energy efficiency
	+ a process for regularly reviewing new technologies to identify opportunities to further reduce GHG emissions and use energy efficiently, consistent with best practice environmental management
	+ monitoring, auditing and transparent public reporting on: GHG emissions from all relevant activities; the success of mitigation measures; and, the project’s contribution to achieving Queensland’s 2030 target and achieving net zero by 2050
	+ ongoing training and capacity building around decarbonisation options, technology and reporting.
	1. Land

| Environmental objective and outcomes |
| --- |
| The activity is operated in a way that protects the environmental values of land including soils, subsoils, landforms and associated flora and fauna.The choice of the site, at which the activity is to be carried out, avoids or minimises serious environmental harm on areas of high conservation value and special significance and sensitive land uses at adjacent places.The location for the activity on a site protects all environmental values relevant to adjacent sensitive use.The design of the facility permits the operation of the site, at which the activity is to be carried out, in accordance with best practice environmental management. |

**Impact assessment**

Conduct the impact assessment in accordance with the latest version of the department’s[Land—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (DES 2020), [Applications for activities with impacts to land](http://www.ehp.qld.gov.au/assets/documents/regulation/era-gl-land-impacts.pdf) (ESR/2015/1839), [DAFF Environmental impact assessment companion guide](https://publications.qld.gov.au/dataset/daff-environmental-impact-assessment-companion-guide/resource/7b1825c4-5e42-4cf8-aa2d-7fa55c2f5e4c) (DAFF 2014), [RPI Act statutory guideline 11/16 companion guide](https://dsdmipprd.blob.core.windows.net/general/rpi-guideline-11-16-dilgp-companion-guide.pdf) (DILGP 2017) and, if any quarry material is needed for construction, the department’s [Quarry material—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (DES 2020). Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the Environmental Protection Regulation.

Describe potential impacts of the proposed land uses, taking into consideration the proposed measures that would be used to avoid or minimise impacts. The impact prediction must address the following matters:

* Any changes to the landscape and its associated visual amenity in and around the proposed project area.
* Any existing or proposed mining tenement under the *Mineral Resources Act 1989*, petroleum authority under the *Petroleum and Gas (Production and Safety) Act 2004*, petroleum tenure under the *Petroleum Act 1923*, geothermal tenure under the *Geothermal Energy Act 2010* and greenhouse gas tenure under the *Greenhouse Gas Storage Act 2009* overlying or adjacent to the proposed project site.
* Temporary and permanent changes to land uses of the proposed project site and adjacent areas, considering:
	+ actual and potential agricultural uses
	+ regional plans and local government planning schemes
	+ any Key Resource Areas that were identified as containing important extractive resources of state or regional significance which the State considers worthy of protection
	+ strategic cropping land, priority agricultural areas, priority living area and strategic environmental areas under the Regional Planning Interests Act and the trigger map for strategic cropping land
	+ findings of the Agricultural land audit (including land of agriculture state interest under State Planning Policy)
	+ impacts on Property and Project Plans approved under the *Soil Conservation Act 1986*
	+ constraints to the expansion of existing and potential agricultural land uses.
* Identify any existing or proposed incompatible land uses within and adjacent to the site, including the impacts on economic resources and the future availability and viability of the resource including extraction, processing and transport location to markets.
* Identify any infrastructure proposed to be located within, or which may have impacts on, the stock route network associated with the *Stock Route Management Act 2002.*

Assess the proposed project against the requirements of the Regional Planning Interests Act.

Propose suitable measures to avoid or minimise impacts related to land use.

Show how landforms, during and after disturbance, will meet any requirements of project or property plans approved under the *Soil Conservation Act 1986*.

For underground mines and any other projects likely to cause land subsidence, assess and provide comprehensive surface subsidence predictions using tools or techniques that enable the location, extent and scale of subsidence, and its effect over time on surface landforms and hydrology to be understood. Propose detailed mitigation measures for any significant impacts that would result from subsidence including impacts on infrastructure, land, hydrology, flora and fauna.

Detail any known or potential sources of contaminated land that could be impacted by the proposed project. Describe how any proposed land use may result in land becoming contaminated.

Identify existing or potential native title rights and interests possibly impacted by the proposed project and the potential for managing those impacts by an Indigenous Land Use Agreement or other measure in accordance with the *Native Title (Queensland) Act 1993* and consistent with the Queensland Government’s [Native title work procedures](https://www.dnrme.qld.gov.au/qld/atsi/native-title-work-procedures) (DNRM 2017).

Detail (including with the use of maps) the following native title considerations:

* current tenure of all land or waters within the project area (which may include creeks)
* land or waters where native title has been determined to exist by the Federal Court
* land or waters that are covered by a native title determination application
* land or waters that are covered by a registered Indigenous Land Use Agreement.

Describe pathways for resolving any native title considerations that comply with the Queensland Government’s [Native title work procedures](https://www.dnrme.qld.gov.au/qld/atsi/native-title-work-procedures) (such as the negotiation and registration of an Indigenous Land Use Agreement).

* 1. Rehabilitation and closure

*[State whether this*

| Environmental objective and outcomes |
| --- |
| Land disturbed by mining activities will be rehabilitated progressively as it becomes available, to minimise the risks of environmental impacts and reduce cumulative areas of disturbed land. The activity is operated in a way that protects the environmental values of land including soils, subsoils, landforms and associated flora and fauna.The activity is operated in a way that disturbed land will be rehabilitated or restored to a stable condition; the land is safe and structurally stable, there is no environmental harm being caused by anything on or in the land, and the land can sustain a post-mining land use. The progress and outcomes of progressive rehabilitation activities will be monitored and reported on to demonstrate how successful they have been in achieving progress towards the agreed final land use, and to inform corrective action where required. |

**Impact assessment**

* + 1. Mining projects

*[Include either ‘Mining projects’ or ‘Other (non-mining) resource projects’ section]*

Address the rehabilitation requirements of the Environmental Protection Act including the provisions requiring a proposed progressive rehabilitation and closure plan (PRC plan). Demonstrate that the proposed rehabilitation is consistent with the department’s guideline [Progressive rehabilitation and closure plans](https://environment.des.qld.gov.au/__data/assets/pdf_file/0026/95444/rs-gl-prc-plan.pdf) (ESR/2019/4964) and best practice approaches about the strategies and methods for progressive and final rehabilitation.

Demonstrate that the rehabilitation of the environment disturbed by construction, operation, and decommissioning of the proposed project can meet the environmental objectives and performance outcomes in Schedule 8A of the Environmental Protection Regulation.

* + - 1. Proposed PRC plan

Provide a proposed PRC plan for the project. The plan must show how and where activities will be carried out on land in a way that maximises the progressive rehabilitation of the land to a stable condition and provide for the condition to which the holder must rehabilitate the land before the EA may be surrendered.

The proposed PRC plan must consist of two components:

* rehabilitation planning part
* progressive rehabilitation and closure plan schedule (PRCP schedule).

The proposed PRC plan must be consistent with the information requirements in the department’s [Submission of a progressive rehabilitation and closure plan](https://www.business.qld.gov.au/running-business/environment/licences-permits/rehabilitation/progressive-rehabilitation-closure-plans) (ESR/2019/4957).

* + - 1. Rehabilitation planning part

Provide the rehabilitation planning part of the proposed PRC plan, by addressing the following:

* Describe each resource tenure, including the area of each tenure.
* Describe the relevant activities and the likely duration of the relevant activities.
* Include a detailed description, including maps, of how and where the relevant activities are to be carried out.
* Include details of the consultation undertaken by the applicant in developing the proposed PRC plan.
* Include details of how the applicant will undertake ongoing consultation in relation to the rehabilitation to be carried out under the plan.
* State the extent to which each proposed post-mining land use or non-use management area is consistent with the outcome of consultation with the community in developing the plan and any strategies or plans for the land of a local government, the State or the Commonwealth.
* For each proposed post-mining land use, state the applicant’s proposed methods or techniques for rehabilitating the land to a stable condition in a way that supports the rehabilitation milestones under the proposed PRCP schedule.
* Identify the risks of a stable condition for land identified as a proposed post-mining land use not being achieved, and how the applicant intends to manage or minimise the risks.
* For each proposed non-use management area, state the reasons the applicant considers the area cannot be rehabilitated to a stable condition because of either of the below:
	+ carrying out rehabilitation of the land would cause a greater risk of environmental harm than not carrying out the rehabilitation or
	+ the risk of environmental harm as a result of not carrying out rehabilitation of the land is confined to the area of the relevant resource tenure and the applicant considers, having regard to each public interest consideration, that it is in the public interest for the land not to be rehabilitated to a stable condition.
* Include copies of reports or other evidence relied on by the applicant for each proposed non-use management area.
* For each proposed non-use management area, state the applicant’s proposed methodology for achieving best practice management of the area to support the management milestones under the proposed PRCP schedule for the area.
* Include other information requirements outlined in the department’s statutory guideline [Progressive rehabilitation and closure plans](https://www.business.qld.gov.au/running-business/environment/licences-permits/rehabilitation/progressive-rehabilitation-closure-plans) (ESR/2019/4964).

**1.1.2 PRCP schedule**

Provide a proposed PRCP schedule which describes time-based milestones for achieving each post-mining land use or non-use management area for the proposed project. Present the proposed PRCP schedule in the table template included in the department’s [Submission of a progressive rehabilitation and closure plan](https://www.business.qld.gov.au/running-business/environment/licences-permits/rehabilitation/progressive-rehabilitation-closure-plans) (ESR/2019/4957).

The proposed PRCP schedule, must identify:

* all land within the resource tenure as either a post-mining land use or non-use management area
* when land becomes available for rehabilitation or improvement
* rehabilitation milestones to achieve a post-mining land use
* management milestones to achieve a non-use management area
* milestone criteria that demonstrate when each milestone has been completed
* completion dates for each milestone to be achieved
* a final site design.

All milestone criteria must be consistent with the SMART principles described in the [Progressive rehabilitation and closure plans](https://www.business.qld.gov.au/running-business/environment/licences-permits/rehabilitation/progressive-rehabilitation-closure-plans) (ESR/2019/4964).

* + 1. Other (non-mining) resource projects

*[Select either ‘Mining projects’ or ‘Other (non-mining) resource projects’ section]*

Conduct the impact assessment in accordance with the latest version of the department’s [Rehabilitation—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (DES 2022),[Streamlined model conditions for petroleum activities](https://environment.des.qld.gov.au/__data/assets/pdf_file/0036/89964/rs-gl-streamlined-model-conditions-petroleum.pdf) (ESR/2016/1989), and [Application requirements for activities with impacts to land](https://environment.des.qld.gov.au/assets/documents/regulation/era-gl-land-impacts.pdf) (ESR/2015/1840).

The EIS must provide information based on relevant guidelines, current best practice approaches and legislative requirements about the strategies and methods for progressive and final rehabilitation of the environment disturbed by construction, operation, and decommissioning of the proposed project.

Develop a rehabilitation strategy that demonstrates how the site will be rehabilitated progressively during the life of the proposed project, including the timing for successfully achieving the rehabilitation goals for the agreed final landforms and land use. The strategy must:

* Demonstrate how the amount of land disturbed at any one time, and the residual loss of land and water bodies with ecological or productive value, will be minimised.
* Describe how waste characterisation influences rehabilitation management practices in terms of risks.
* Demonstrate that all potential high-impact elements of the proposed project (e.g. spoil dumps, tailings and water management dams, creek and watercourse diversions and crossings, right of ways and easements, subsidence areas and borrow pits) are capable of being managed and rehabilitated to achieve the agreed final land use and topography.
* Present in a table, the goals and timing of the progressive rehabilitation to achieve the agreed final land use. The table must describe in detail:
	+ rehabilitation objectives for each domain
	+ indicators that can measure progress towards the objectives
	+ completion criteria for each indicator that would be used to measure progress and completion in relation to the final land uses and wildlife habitat areas.
* Illustrate and describe the proposed final land use and topography of the site. The proposed final landform must:
	+ be in a stable condition. That is, the land is safe and structurally stable; there is no environmental harm being caused by anything on or in the land; and the land can sustain a post mining land use (section 111A of the Environmental Protection Act).
	+ re-establish a functional hydrologic system that prevents erosion, maximises connectivity and prevents upstream and downstream surface and groundwater contamination in the long term.
	+ be consistent with the surrounding natural topography and landscape.
* Provide maps at suitable scales showing:
	+ for the life of the proposed project:
		1. the location of disturbance areas
		2. relevant infrastructure
		3. the sequence and timing of operations and progressive rehabilitation
	+ the proposed final topography, with contours at suitable intervals, showing:
		1. waste dumps, and any dams that would not be removed and rehabilitated.
* Where infrastructure would lie in relation to flood levels up to and including the ‘probable maximum flood level’ based on the Bureau of Meteorology’s ‘probable maximum precipitation’ forecast for the locality and any effects on flooding or flows.
* Describe how achievement of the rehabilitation objectives would be monitored, audited and reported, and how corrective actions would be managed.

Provide a detailed description of the topsoil resource on site and how topsoil storage will be quantitatively and qualitatively managed for the life of the proposed project to prevent topsoil loss from any disturbance areas and to ensure successful revegetation and rehabilitation. The description must include a progressive inventory of topsoil and detail how topsoil will be stripped, salvaged and stockpiled and used in progressive rehabilitation.

* 1. Water
		1. Water quality

*[State whether this*

| Environmental objective and outcomes |
| --- |
| The activity will be operated in a way that protects environmental values of waters.The activity will be operated in a way that protects the environmental values of groundwater and any associated surface ecological systems.The activity will be managed in a way that prevents or minimises adverse effects on wetlands. |

**Impact assessment**

Conduct the impact assessment in accordance with the department’s [Water—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (ESR/2020/5312)*,* [Applications for activities with impacts to water](http://www.ehp.qld.gov.au/assets/documents/regulation/era-gl-water-impacts.pdf) (ESR/2015/1837), [Water quality guidelines](https://environment.des.qld.gov.au/management/water/quality-guidelines) (Queensland Government, 2020)*,* [Monitoring and sampling manual](https://environment.des.qld.gov.au/management/water/quality-guidelines/sampling-manual) (DES 2018)*,* and the [Groundwater quality assessment guideline](https://publications.qld.gov.au/en/dataset/groundwater-quality-assessment-guideline) (DSITI 2017). Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the Environmental Protection Regulation.

With reference to the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 and section 9 the Environmental Protection Act, identify the environmental values of surface waters within the proposed project area and immediately downstream that may be affected by the proposed project, including any human uses and cultural values of water.

Define the relevant water quality objectives applicable to the environmental values and demonstrate how these will be met by the proposed project during construction, operation, decommissioning and following proposed project completion. Where water quality objectives are not available, local water quality objectives must be derived according to department’s latest [Water quality guidelines](https://environment.des.qld.gov.au/management/water/quality-guidelines) (Queensland Government, 2020) and include any semi-permanent or permanent streams and pools, including stock water.

Detail the chemical, physical and biological characteristics of surface waters and groundwater within the area that may be affected by the proposed project and at suitable reference locations using sufficient data to define natural variation, including seasonal variation.

Describe the quantity, quality, location, duration and timing of all potential and/or proposed releases of contaminants. Releases may include controlled water discharges to surface water streams, uncontrolled discharges when the design capacity of storages is exceeded, spills of products during loading or transportation, contaminated run-off from operational areas of the site (including seepage from waste rock dumps), or run-off from disturbed acid sulfate soils.

Assess the potential impact of any releases from point or diffuse sources on all relevant environmental values and water quality objectives of the receiving environment. The impact assessment must consider the resultant quality and hydrology of receiving waters and the assimilative capacity of the receiving environment.

Describe how water quality objectives would be achieved and environmental impacts would be avoided or minimised through the implementation of management strategies that comply with the management hierarchy and management intent of the Environmental Protection (Water and Wetland Biodiversity) Policy 2019. Appropriate management strategies may include the use of erosion and sediment control practices, and the separation of clean storm water run-off from the run-off from disturbed and operational areas of the site.

Describe how monitoring would be used to demonstrate that objectives were being assessed, audited and met. For example, provide measurable criteria, standards and/or indicators that will be used to assess the condition of the ecological values and health of surface water environments. Propose corrective actions to be used if objectives are not likely to be met.

*[This paragraph is for proposed coastal projects—delete if it’s not applicable]* Identify the potential impacts of dredging, bed levelling, and/or the potential impacts of shipping and offshore transhipping operations on the marine environment. The impact assessment must also address changes in water quality, including increased water turbidity or other contaminants, due to the disturbance of benthic sediments or the disposal and/or relocation of material. It must consider potential ecological impacts due to changes in water quality or the disturbance of the benthos. Provide strategies to avoid, mitigate and manage potential impacts. Refer to section 9.6 (Coastal environment) for further information requirements applicable to the coastal environment*.*

* + 1. Water resources

*[State whether this*

| Environmental objective and outcomes |
| --- |
| * Equitable, sustainable and efficient use of water resources
* maintenance of environmental flows and water quality to support the long term condition and viability of terrestrial, riverine, wetland, lacustrine, estuarine, coastal and marine ecosystems
* maintenance of the stability of beds and banks of watercourses, and the shores of waterbodies, estuaries and the coast
* maintenance of supply to existing users of surface and groundwater resources.
 |

**Impact assessment**

Conduct the impact assessment in accordance with the department’s [Water—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (DES 2020) and [DAFF Environmental impact assessment companion guide](https://publications.qld.gov.au/dataset/daff-environmental-impact-assessment-companion-guide/resource/7b1825c4-5e42-4cf8-aa2d-7fa55c2f5e4c) (DAFF 2014). Address the requirements of section 126A of the Environmental Protection Act.

Describe present and potential users and uses of water in areas potentially affected by the proposed project, including municipal, agricultural, industrial, recreational and environmental uses of water.

Describe the quality, quantity and significance of groundwater in the proposed project area and any surrounding area potentially affected by the proposed project’s activities. Include the following:

* characterise: the nature, type, geology/stratigraphy and depth to and thickness of the aquifers; their hydraulic properties; and value as water supply sources
* analyse the movement of underground water to and from the aquifer(s), including how the aquifer(s) interacts with other aquifers and surface water, and the effect of geological structures on this movement
* characterise the quality and volume of the groundwater including seasonal variations of groundwater levels
* provide surveys of existing groundwater supply facilities (e.g. bores, wells, or excavations).

Model and describe the inputs, movements, exchanges and outputs of surface water and groundwater that would or may be affected by the proposed project. The models used to estimate associated water take must take into account the climatic conditions at the site, assess the potential impacts on water resources and include a site water balance. The model should be peer-reviewed by an independent appropriately qualified person(s) consistent with the *Australian groundwater modelling guidelines* (Barnett et. al. 2012).

Provide a description of the proposed project’s impacts at the local scale and in a regional context including:

* changes in flow regimes from diversions, water take and discharges
* groundwater draw-down and recharge
* management of mine affected water
* alterations to riparian vegetation and bank and channel morphology
* direct and indirect impacts arising from the development.

Provide a water management plan, for the life of the proposed project, which details management strategies of mine-affected water, sediment-affected water and drainage from areas not disturbed by mining activities. Any water taken off site for further use must also be accounted for and must be consistent with the General Use Approval for associated water (including coal seam gas water).

Identify any approvals or entitlements that would be needed under the Water Act. Specifically address whether or not the proposed project would take water from, or affect recharge to, aquifers of the Great Artesian Basin. Describe the practices and procedures that would be used to avoid or minimise impacts on water resources.

Describe how ‘make good’ provisions would apply to any water users that may be adversely affected by the proposed project. Propose a network of groundwater monitoring bores before and after the commencement of the proposed project that would be suitable for the purposes of monitoring groundwater quality and hydrology impacts that may occur as a result of the resource activity. Include details on investigation timeframes and actions if exceedances are detected.

Include maps of suitable scale showing the location of diversions and other water-related infrastructure in relation to resource infrastructure. Detail any significant diversion or interception of overland flow, including the effects of subsidence.

*[This sentence is for watercourse diversions—delete if it’s not applicable]* Describe watercourse diversion design, operation and monitoring based on current engineering practice and relevant guidelines. For watercourse diversions authorised by the conditions of the EA under the Environmental Protection Act, use the guideline [Works that interfere with water in a watercourse for a resource activity—watercourse diversions](https://www.dnrme.qld.gov.au/?a=109113:policy_registry/watercourse-diversions-water-act.pdf&ver=2.00)(DNRME 2019).

Describe the options for supplying water to the proposed project and assess any potential consequential impacts in relation to the objectives and strategies of any water plan and associated planning documents that may apply.

Describe the proposed supply of potable water for the proposed project, including temporary demands during the construction period. Also describe on-site storage and treatment requirements for wastewater from accommodation and/or offices and workshops.

* + - 1. CSG proposed projects outside the Surat cumulative management area (CMA)

*[This section is only for proposed CSG projects outside the Surat CMA—delete if it is not relevant.]*

Develop hydrological models to describe the inputs, movements, exchanges and outputs of all significant quantities of surface water and groundwater resources that may be affected by the proposed project. The models must address the range of climatic conditions and the potential for cumulative impacts that may be experienced at the site, and adequately assess the potential impacts of the proposed project on water resources. The models must include a site water balance. Use the models to assess the proposed project’s potential impacts at the local and regional scale, including:

* changes to flow regimes (surface and groundwater) from CSG operations, diversions, water take (including dewatering) and discharges
* alterations to riparian vegetation, and bank and channel morphology
* direct and indirect impacts arising from the proposed project
* monitoring and adopted measures to avoid impact on local wetlands, streams, groundwater dependent ecosystems and waterways.
	+ - 1. CSG proposed projects within the Surat cumulative management area (CMA)

*[This section is for proposed CSG projects within the Surat CMA—delete if it is not relevant.]*

Assess the changes to stream and aquifer hydrology that may occur due to the proposed project’s water take, transfer or recharge of surface water and groundwater. Identify any short- or long-term adverse or beneficial impacts of the proposed project on surface and groundwater. The assessment must address the range of climatic conditions at the site, and the potential for cumulative impacts to surface water and also groundwater.

As the proposed project is located within the [Surat CMA](https://environment.des.qld.gov.au/management/activities/non-mining/coal-seam-gas/cumulative-management), use the regional groundwater flow model developed by the Office of Groundwater Water Impact Assessment to assess any cumulative impacts of coal seam gas developments on groundwater resources. Additional local-scale models may also be required in order to assess the proposed project’s impacts. The assessment must address the following matters:

* changes to surface and groundwater flow regimes due to CSG operations, diversions, water take (including dewatering) and discharges
* alterations to riparian vegetation, and bank and channel morphology
* direct and indirect impacts arising from the development
* measures to avoid or minimise impact on local wetlands, groundwater dependent ecosystems and waterways
* monitoring during operations, and corrective actions that would be taken for any previously unforeseen unacceptable impacts.
	+ - 1. The Independent Expert Scientific Committee

 *[This section is only for proposed projects where ‘water resources’ is a controlling provision under the EPBC Act—delete if it is not relevant]*

The EIS must provide the information requirements contained in the IESC’s [Information guidelines](http://iesc.environment.gov.au/information-guidelines) (IESC, 2020) including relevant information guidelines explanatory notes (e.g. uncertainty analysis, assessing groundwater-dependent ecosystems).

* + 1. Flooding

*[State whether this is a critical matter]*

| Environmental objective and outcomes |
| --- |
| The construction and operation of the proposed project aims to ensure that the risk and potential adverse impacts from flooding are avoided, minimised or mitigated to protect people, property and the environment. |

**Impact assessment**

Describe the history of flooding onsite and in proximity to the proposed project site. Describe current flood risk for a range of annual exceedance probabilities up to the probable maximum flood for the proposed project site. Use flood modelling to assess how the proposed project may potentially change flooding and run-off characteristics on-site and both upstream and downstream of the site. The assessment must consider all infrastructure associated with the proposed project including levees, roads, and linear infrastructure, and all proposed measures to avoid or minimise impacts.

Evidence must be provided to demonstrate that the securing of storage containers of hazardous contaminants during flood events meets the requirements of schedule 8 of the Environmental Protection Regulation.

Describe, illustrate and assess where any proposed infrastructure, including tailing storage facilities or dams, voids and waste rock dumps, disturbed and rehabilitated areas, would lie in relation to the extent to any modelled flood level, including the probable maximum flood level. Describe management actions to minimise impacts of flooding to mine infrastructure and manage in mine pit water post-flooding.

Assess the proposed project’s vulnerabilities to climate change (e.g. changing patterns of rainfall, hydrology, temperature and extreme weather events). Describe possible adaptation strategies (preferred and alternative) based on climate change projections for the proposed project site.

* 1. Regulated structures

| Environmental objective and outcomes |
| --- |
| The design of the facility permits the operation of the site, at which the activity is to be carried out, in accordance with best practice environmental managementThe potential consequences of the failure of a regulated structure on human life and the environment require that the highest standards are used for their design, construction, operation, modification and decommissioning. The industry, government and the Australian National Committee on Large Dams Inc. have published several guidelines, which are to be used to further develop objectives and outcomes for individual projects and the regulated structures they involve. |

**Impact assessment**

Conduct the impact assessments on regulated structures in accordance with the latest version of the department’s guidelines on [Regulated structures—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (DES 2020), [Structures which are dams of levees constructed as part of environmentally relevant activities](https://environment.des.qld.gov.au/__data/assets/pdf_file/0031/89383/era-gl-structures-dams-levees-eras.pdf) (ESR/2016/1934), and [Manual for assessing hazard consequence categories and hydraulic performance of structures](https://environment.des.qld.gov.au/__data/assets/pdf_file/0023/90266/era-mn-assessing-consequence-hydraulic-performance.pdf) (ESR/2016/1933).

Describe the purpose of all dams or levees proposed on the project site. Show their locations on appropriately scaled maps, and provide plans and cross-sections, illustrating such features as embankment heights, spillways, discharge points, design storage allowances, and maximum volumes. Describe how storage structures and other infrastructure would be sited to avoid or minimise risks from flooding.

Undertake a consequence category assessment for each dam or levee, according to the criteria outlined in department’s [Manual for assessing hazard consequence categories and hydraulic performance of structures](https://environment.des.qld.gov.au/__data/assets/pdf_file/0023/90266/era-mn-assessing-consequence-hydraulic-performance.pdf) (ESR/2016/1933[[1]](#footnote-2)). The assessment must be undertaken for the three different failure event scenarios described in department’s manual, i.e. for seepage, overtopping and dam break. Regulated structures must comply with the [Manual for assessing hazard consequence categories and hydraulic performance of structures](https://environment.des.qld.gov.au/__data/assets/pdf_file/0023/90266/era-mn-assessing-consequence-hydraulic-performance.pdf) (ESR/2016/1933) in accordance with schedule 8, division 2 of the Environmental Protection Regulation.

Following the consequence category assessment, determine the consequence category (‘low, significant, or high’) according to table 1 of department’s [Manual for assessing hazard consequence categories and hydraulic performance of structures](https://environment.des.qld.gov.au/__data/assets/pdf_file/0023/90266/era-mn-assessing-consequence-hydraulic-performance.pdf) (ESR/2016/1933) and provide certified copies of the consequence category determination for each of the proposed dams or levees assessed.

Describe how risks associated with dam or storage failure, seepage through the floor, embankments of the dams, and/or with overtopping of the structures will be avoided, minimised or mitigated to protect people, property and the environment.

* 1. Flora and fauna

| Environmental objective and outcomes |
| --- |
| The activity will be operated in a way that protects the environmental values of land including soils, subsoils, landforms and associated flora and fauna.There will be no potential or actual adverse effect on a wetland as part of carrying out the activity.The proposed project minimises serious environmental harm on areas of high conservation value and special significance and sensitive land uses at adjacent places.The location for the activity on a site protects all environmental values relevant to adjacent sensitive use.The proposed project manages the impacts on the environment by seeking to achieve ecological sustainability, including protected wildlife and habitat.Critical habitat receives special management considerations and protection through a management plan for the proposed project. The proposed project avoids significant residual impacts to matters of national environmental significance (MNES) and matters of state environmental significance (MSES), mitigates impacts where they cannot be avoided, and offsets any residual impacts.The proposed project provides for the conservation of the marine environment, particularly the Great Barrier Reef Marine Park. *[delete this objective if the proposed project would have no effect on the marine environment]*The construction, operation and decommissioning of the proposed project must be consistent with all statutory and regulatory requirements of the federal, state and local government and be consistent with their relevant plans, strategies, policies and guidelines that relate to the terrestrial and aquatic ecological environment. |

**Impact assessment**

Describe the potential direct and indirect impacts on the biodiversity and natural environmental values of affected areas impacted by the construction, operation and decommissioning of the proposed project. Take into account any proposed avoidance and/or mitigation measures. The EIS must provide information based on relevant guidelines, including the latest version of the department’s [EIS information guidelines](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis)(DES 2020–2022) that cover *terrestrial ecology, aquatic ecology, coastal, groundwater dependent ecosystems, water, matters of national environmental significance,* and *biosecurity*.

Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the Environmental Protection Regulation.

* + 1. Biodiversity

The assessment must include the following key elements:

* identification of all significant species and ecological communities, including MSES and MNES, listed flora and fauna species, and regional ecosystems, on the proposed project site and in its vicinity
* terrestrial and aquatic ecosystems including groundwater dependent ecosystems and subterranean fauna such as stygofauna and their interactions
* biological diversity
* the integrity of ecological processes, including habitats of listed threatened, near threatened or special least-concern species
* connectivity of habitats and ecosystems
* the integrity of landscapes and places, including wilderness and similar natural places
* chronic, low-level exposure to contaminants or the bio-accumulation of contaminants
* direct and indirect impacts on terrestrial and aquatic species and ecosystems whether due to: vegetation clearing; hydrological changes; discharges of contaminants to water, air or land; noise; and other relevant matters
* impacts of waterway barriers on fish passage in all waterways mapped on the Queensland Waterways for Waterway Barrier Works spatial data layer *[delete this point if it is not relevant]*
* likely impacts of shipping, transhipping and barge movements on estuarine and marine plants and fauna
* [delete this point if it is not relevant] likely impacts of underwater noise pollution on estuarine and marine fauna due to shipping/barge movements and/or piling programs for jetties, wharfs or other structures (e.g. dolphins).

Describe any actions of the proposed project that require an authority under the Nature Conservation Act, and/or would be assessable development for the purposes of the Vegetation Management Act, the Regional Planning Interests Act, the Fisheries Act and the *Planning Act 2016*. Features to consider include regional ecosystems, environmentally sensitive areas, wetlands, nature refuges, protected areas and strategic environmental areas.

Propose practical measures to avoid, minimise, mitigate and/or offset direct or indirect impacts on ecological environmental values.

Assess how the nominated quantitative indicators and standards may be achieved for nature conservation management. In particular, address measures to protect or preserve any listed threatened, near-threatened or special least concern species.

Propose measures that would avoid the need for waterway barriers or propose measures to mitigate the impacts of their construction and operation.

Assess the need for buffer zones and the retention, rehabilitation or planting of movement corridors. The assessment must take into account of the role of buffer zones in maintaining and enhancing riparian vegetation to enhance water quality and habitat connectivity.

Propose rehabilitation success criteria, in relation to natural values, that would be used to measure the progressive rehabilitation of disturbed areas. Describe how the achievement of the objectives would be monitored and audited, and how corrective actions would be managed. Proposals for the rehabilitation of disturbed areas must incorporate, in suitable habitat, provision of low shrubs, ground level hollow logs, stick piles, nest hollows, ground litter and fish passage and habitat.

Specifically address any obligations imposed by State or Commonwealth legislation or policy or international treaty obligations, such as the China–Australia Migratory Bird Agreement, Japan–Australia Migratory Bird Agreement, or Republic of Korea–Australia Migratory Bird Agreement.

* + 1. Offsets

*[Remove reference to MNES if not relevant]*

After demonstrating that all reasonable on-site avoidance and mitigation measures are to be applied, identify whether the proposed project will result in a significant residual impact (SRI) on MSES, requiring an offset with reference to the [Queensland Environmental Offsets Policy](https://environment.des.qld.gov.au/__data/assets/pdf_file/0041/89789/offsets-policyv1-4.pdf) and [Significant Residual Impact Guideline 2014](https://environment.des.qld.gov.au/__data/assets/pdf_file/0017/90404/significant-residual-impact-guide.pdf) (or current version) and the [Queensland Environmental Offsets framework](https://www.qld.gov.au/environment/pollution/management/offsets).

Propose offsets consistent with the applicable State and Commonwealth legislation or policies for any significant residual impact (SRI):

* Where a SRI will occur on a prescribed environmental matter as outlined in the Environmental Offsets Regulation 2014, the offset proposal(s) must be consistent with the requirements of Queensland’s Environmental Offsets Act and the latest version of the [Queensland environmental offsets policy](https://environment.des.qld.gov.au/__data/assets/pdf_file/0021/235335/offsets-policyv1-10.pdf) *(EPP/2021/1658)*.
* Where Commonwealth offset policy requires an offset for a significant impact on a MNES, the offset proposal(s) must be consistent with the requirements of the EPBC Act environmental offsets policy.

Provide as an appendix to the EIS, an offset proposal which outlines the proposed offset delivery approach to address the proposed project’s SRI on MSES and MNES. The document should:

* Address both State and Commonwealth offset obligations, and clearly identify where any overlaps across jurisdictions.
* For staged offsets, take into account the full extent of potential impacts on prescribed environmental matters from the entire proposal as part of the SRI test.
* Identify and illustrate the extent of any SRI overlap between MNES and MSES.
	+ 1. Biosecurity

| Environmental objective and outcomes |
| --- |
| The construction, operation and decommissioning of the proposed project must ensure:* the introduction and spread of weeds, pests (including marine pests) and disease, pathogens and contaminants are avoided or minimised
* existing weeds and pests, including marine pests, are controlled, including biosecurity threats and their management
* the performance outcomes correspond to the relevant policies, legislation and guidelines, and that sufficient evidence is supplied (through studies and proposed management measures) to show these outcomes can be achieved.
 |

**Impact assessment**

Conduct the impact assessment in accordance with the latest version of the department’s [Biosecurity—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (DES 2020).

Describe the current distribution and abundance of pest animals and weeds on the proposed project site.

Describe the impact the proposed project’s construction and operation will have on the spread of pest animals, weed species and disease.

Propose detailed measures to remove, control and limit the spread of pests, weeds, diseases, pathogens and contaminants on the proposed project site and any areas under the proponent’s control. This includes declared plants and animals and restricted areas under Queensland’s *Biosecurity Act 2014*, the Commonwealth *Biosecurity Act 2015* and weeds of national significance and designated pests under the Queensland *Public Health Act 2005*. All proposed measures are to be in accordance with biosecurity surveillance or prevention measures authorised under the Biosecurity Act(Qld) and aligned with local government pest management priorities.

Detail a monitoring program that would audit the success of biosecurity measures, identify whether objectives have been met, and describe corrective actions to be used if monitoring indicates objectives are not being met.

* 1. Coastal environment

| Environmental objective and outcomes |
| --- |
| The proposed project’s objective for the coastal environment is that its activities are operated in a way that avoids or minimises adverse impacts on coastal environmental values, processes and resources.The construction, operation and decommissioning of the proposed project must be consistent with all statutory and regulatory requirements of the federal, state and local government and be consistent with their relevant plans, strategies, policies and guidelines that relate to the coastal environment. The coastal environment is taken to include estuarine, littoral and marine environmental values, and the amenity of important natural coastal landscapes, views and vistas. |

**Impact assessment**

Conduct the impact assessment in accordance with the latest version of the department’s [Coastal—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (DES 2020).

Provide illustrated details of the existing coastal zone that is potentially affected by the proposed project, and describe and illustrate any proposed works in the coastal zone, including a schedule of ongoing maintenance requirements. The description must address the following matters:

* current and recently historical estuarine, littoral and marine morphology with a description of the processes shaping the coastal zone (e.g. tides, rivers, floods, coastal currents, major storms, rocky headlands, or islands)
* existing estuarine, littoral and marine environmental values, including water quality, benthos, aquatic flora and fauna, mangrove areas, salt marsh, and amenity, that could be impacted by construction or operation of the proposed project
* state or Commonwealth marine parks in the region of the proposed project’s site
* separately mention marine plants and any fish habitat areas protected under the Fisheries Act
* existing residential, commercial or recreational uses of the coastal zone that could be impacted by construction or operation of the proposed project
* capital dredging for navigation channels, berths, swing basins or harbours
* maintenance dredging or bed levelling for navigation channels, berths, swing basins or harbours
* excavations on or near the shore
* potential impacts of shipping and offshore transhipping operations on the marine environment
* the volume, chemical and physical characteristics of the dredged or excavated material, with particular regard to acid sulfate soils
* proposed disposal or placement options for dredged or excavated material, including an assessment of whether disposal in waters or for land reclamation would be likely to receive approval
* any jetties, bunds, harbour walls, groynes, channel markers, or other infrastructure, to be built in waters
* buildings and infrastructure to be built on the shore or on land close to the shore
* any proposals to undertake transhipping of material in state waters or the Commonwealth marine area.

Assess the potential impacts of the proposed project’s activities in the coastal zone. Model the spread and assess the impacts of any sediment plume to be created by dredging, construction or excavations. Assess the potential loss of habitat or diversity that could result from the proposed project. Also assess any potential impacts on commercial or recreational fisheries, including impacts that could arise from the loss of nursery habitat (e.g. seagrass beds, reefs, or, mangroves) of target species (such as prawns and fish). Assess the potential short-term or long-term impacts of noise on marine fauna, particularly cetaceans.

Propose measures to avoid or minimise the potential impacts of the proposed project’s activities in the coastal zone. If acid sulfate soils would be disturbed, describe measures to avoid oxidation of the sulfides or to treat and neutralise the acid if it forms.

Detail any residual impacts that cannot be avoided, and propose measures to offset the residual loss.

Detail any approvals under State and Commonwealth legislation that would be required to construct or operate the proposed project in the coastal zone. Identify any development for the proposed project outside a mining or petroleum lease that would be assessable development within the coastal zone requiring approval under the *Planning Act* . Provide sufficient information and assessment for the relevant authorities to decide whether granting the approval(s) would be appropriate.

Develop and describe suitable indicators for measuring coastal resources and values, and set objectives to protect them in accordance with relevant State Planning Policy, guidelines and legislation. Refer to the [State Planning Policy—state interest guideline coastal environment](https://dsdmipprd.blob.core.windows.net/general/spp-guideline-coastal-environment.pdf) (DSDIP 2016) and the department’s [guidelines on coastal development](https://www.qld.gov.au/environment/coasts-waterways/plans/resources).

Detail a monitoring program that would audit the success of mitigation measures, measure whether objectives have been met, and describe corrective actions to be used if monitoring shows that objectives are not being met.

* 1. Air

| Environmental objective and outcomes |
| --- |
| The activity will be operated in a way that protects the environmental values of air. |

**Impact assessment**

Describe the existing air environment at the proposed project site and the surrounding area and the airshed, including the background/ambient levels of those air contaminants. Include all available data from any site-specific air monitoring, the National Pollutant Inventory (NPI) reporting, and/or ambient air quality monitoring undertaken by the Queensland government.

Provide an emissions inventory and description of the characteristics of contaminants or materials that would be released from point and diffuse sources and fugitive emissions when carrying out the activity (point source and fugitive emissions). The description must address the construction, commissioning, operation, upset conditions, and closure of the proposed project.

Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the Environmental Protection Regulation.

Predict the impacts of the releases from the activity on environmental values of the receiving environment using established and accepted methods and in accordance with the Environmental Protection Regulation, Environmental Protection (Air) Policy 2019 (EPP (Air)) and the latest version of the department’s [Air—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (ESR/2020/5294) and [Applications for activities with impacts to air](http://www.ehp.qld.gov.au/assets/documents/regulation/era-gl-air-impacts.pdf) (ESR/2015/1840). The description of impacts must take into consideration the sensitivity and assimilative capacity of the receiving environment and the practices and procedures that would be used to avoid or minimise impacts. The impact prediction must address the cumulative impact of any release with other known releases of contaminants, materials or wastes associated with existing development and possible future development (as described by approved plans and existing project approvals). It must also quantify the human health risk and amenity impacts associated with emissions from the proposed project for all contaminants whether or not they are covered by the *National Environmental Protection (Ambient Air Quality) Measure* or the EPP (Air) or not.

Describe the proposed mitigation measures to limit impacts from air emissions and how the proposed activity will be consistent with best practice environmental management. The EIS must address the compatibility of the proposed project’s air emissions with existing or potential land uses in surrounding areas. Potential land uses might be gauged from the zonings of local planning schemes, State Development Areas or other relevant planning frameworks.

Describe how the proposed project’s air emission objectives would be achieved, monitored, audited and reported, and how corrective actions would be managed for the life of the proposed project.

Proponents are responsible for determining if they have obligations under the Commonwealth *National Greenhouse and Energy Reporting Act 2007* (NGER Act) and ensuring that information regarding greenhouse gas emissions and energy production and consumption provided in the EIS is consistent with requirements of the NGER Act and its subordinate legislation.

Provide an inventory of projected annual emissions for each relevant greenhouse gas, with total emissions expressed in ‘CO2 equivalent’ terms. Estimate emissions from upstream activities associated with the proposed project, including the fossil fuel based electricity to be used during construction, operation and decommissioning and briefly describe the methods used to make the estimates. The *National Greenhouse and Energy Reporting (Measurement) Determination 2008* provides methods and criteria for calculating greenhouse gas emissions and energy data under the NGER Act which can be used in combination with [National greenhouse energy report technical guidelines](http://www.environment.gov.au/climate-change/greenhouse-gas-measurement/nger/technical-guidelines) (DAWE 2020) as a reference source for emission estimate methods and supplemented with information from other sources where practicable and appropriate.

Coal mining projects must include estimates of coal seam methane to be released as well as emissions resulting from such activities as transportation of products and consumables, and energy use at the proposed project site.

Assess the potential impacts of operations within the proposed project area on the State and National greenhouse gas inventories and propose greenhouse gas abatement measures, including:

* a description of the proposed preferred and alternative measures to avoid and/or minimise greenhouse gas emissions directly resulting from activities of the proposed project, including such activities as transportation of products and consumables, and energy use by the proposed project
* an assessment of how the preferred measures minimise emissions and achieve energy efficiency
* a comparison of the preferred measures for emission controls and energy consumption with best practice environmental management in the relevant sector of industry
* a description of any opportunities for further offsetting of greenhouse gas emissions through indirect means.

*[For proposed projects using gas flaring; delete if not relevant]* Describe flare emissions if gas flaring will be used during the commissioning stages and/or during the emergency under normal operation. If the flare is expected to be used continuously for more than three months to incinerate the waste gases, then conduct the impact assessment from this source for inclusion in the EIS as a separate item of the assessment.

* 1. Noise and vibration

| Environmental objective and outcomes |
| --- |
| The activity will be operated in a way that protects the environmental values of the acoustic environment. |

**Impact assessment**

Describe and illustrate the locations of any sensitive receptors that are listed in Schedule 1 of the Environmental Protection (Noise) Policy 2019. Also describe any other environmental values that could be impacted by emissions from the proposed project.

Fully describe the sources and characteristics of noise and vibration that would be emitted during the construction, commissioning, operation, upset conditions, and closure of the proposed project.

Conduct a noise and vibration impact assessment in accordance with the latest version of the department’s [Noise and vibration—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (ESR/2020/5305) and [Applications for activities with noise impacts](https://www.ehp.qld.gov.au/assets/documents/regulation/era-gl-noise-impacts.pdf) (ESR/2015/1838). The assessment must address low-frequency (<200 Hz) noise emissions and potential cumulative impact of the proposed project with other emissions of noise from any existing developments and known possible future development in the area.

Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the Environmental Protection Regulation.

Describe how the proposed activity would be managed to be consistent with best practice environmental management, including the control of background creep in noise as outlined in the Environmental Protection (Noise) Policy 2019. The EIS must address the compatibility of the proposed project’s noise emissions with existing or potential land uses in surrounding areas. Potential land uses might be gauged from the zonings of local planning schemes, State Development Areas or other relevant planning frameworks.

Describe how the environmental management objectives for noise and vibrations would be achieved, monitored, audited and reported, and how corrective actions would be managed.

*[For proposed coastal projects with the potential of underwater noise; delete if not relevant]* Describe how the proposed activity (including piling and shipping) could impact aquatic and marine fauna based on underwater noise modelling. Underwater noise modelling must include modelling of bed substrates (acoustically reflective or acoustically absorptive) to understand the propagation beyond the proximity of the noise source (e.g. piling). The assessment must identify the distance to which there would be a biological impact to those species.

*[For proposed coastal projects with the potential of underwater noise; delete if not relevant]* Propose environmental management strategies that will avoid long-term impacts of underwater noise on aquatic and marine fauna and describe how objectives would be monitored and audited, and how corrective actions would be managed.

* 1. Waste management

| Environmental objective and outcomes |
| --- |
| Any waste generated, transported, or received as part of carrying out the activity is managed in a way that protects all environmental values. |

**Impact assessment**

Conduct the impact assessment in accordance with the latest version of the department’s [Waste—EIS information guidelines](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (ESR/2020/5311)and [Applications for activities with waste impacts](https://environment.des.qld.gov.au/__data/assets/pdf_file/0038/87986/era-gl-waste-impacts.pdf) (ESR/2015/1836). Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the Environmental Protection Regulation.

Describe all the expected waste streams from the proposed project activities during the construction, operational, rehabilitation and decommissioning phases of the proposed project. Waste streams for resource projects would typically include: waste rock, tailings and coarse rejects from mining and mineral processing; salt from petroleum and gas projects; and brackish, saline or mine affected water from all types of resource projects.

Describe the quantity, and physical and chemical characteristics of each significant waste, any attributes that may affect its dispersal in the environment, and its associated risk of causing environmental harm.

Define and describe objectives and practical measures for protecting or enhancing environmental values from impacts from wastes.

Assess and describe the proposed management measures against the preferred waste management hierarchy, namely: avoid and reduce waste generation; cleaner production; reduce; recycle; reuse; reprocess and reclaim; waste to energy; treatment; disposal. This includes the generation and storage of waste.

Describe how nominated quantitative standards and indicators may be achieved for waste management, and how the achievement of the objectives would be monitored, audited and managed.

Detail waste management planning for the proposed project, in particular how measures have been applied to prevent or minimise environmental impacts due to waste at each stage of the proposed project.

Use a material/energy flow analysis to provide details of natural resource use efficiency (such as energy and water), integrated processing design, and any co-generation of power and by-product reuse.

Detail the geochemistry of all waste rock, including spoil, tailings and rejects. Assess the potential risks associated with this waste stream and describe the management of progressive placement and any disposal strategy to minimise any potential impacts on environmental values of the proposed project area. Detail how high risk waste material will be managed in the rehabilitation plan.

Identify the quantity, quality and location of all potential discharges of water and contaminants by the proposed project, including treated wastewater and sewage. Describe whether the discharges would be from point sources (whether uncontrolled and controlled discharges) or diffuse sources (such as irrigation to land of treated wastewater/sewage effluent), and describe the receiving environment (such as land or surface waters).

Provide a risk assessment of the potential impacts on waters, in the near-field or far-field, resulting from controlled or uncontrolled discharges from the site. Address the following matters with regard to every potential discharge of contaminated water:

* Describe the circumstances in which controlled and uncontrolled discharges might occur.
* Provide stream flow data and information on discharge water quality, including any potential variation in discharge water quality that will be used in combination with proposed discharge rates to estimate in-stream dilution and water quality. Chemical and physical properties of any wastewater, including concentrations of constituents, at the point of entering natural surface waters must be discussed along with toxicity of effluent constituents to human health, flora and fauna.
* Provide an assessment of the available assimilative capacity of the receiving waters given existing water quality and other potential point source discharges in the catchment. Options for controlled discharge at times of natural stream flow must be investigated to ensure that adequate flushing of wastewater is achieved.
* Provide water quality limits that are appropriate to maintain background water quality and protect other water uses.
* Describe the necessary streamflow conditions in receiving waters under which controlled discharges will be allowed.

Provide relevant information on existing and proposed sewage infrastructure relevant to environmentally relevant activity (ERA) 63, by referring to relevant department policies and guidelines, depending on the proposed sewage collection and treatment infrastructure proposed the reuse and/or disposal of treated wastewater and sewage wastes generated.

Identify [end of waste codes](https://www.business.qld.gov.au/running-business/environment/waste-management/regulated-waste/eow-framework) (Queensland Government 2020) under the *Waste Reduction and Recycling Act 2011* which may be relevant for the proposed project. This may include *[delete any which are clearly out of scope or not relevant]* associated water (including coal seam gas water), associated water for irrigation (including coal seam gas water), coal seam gas drilling mud, coal combustion products.

*[This paragraph is only for proposed CSG projects; delete if it is not relevant]* Develop a CSG water management plan consistent with the CSG water management criteria and salt management criteria in the [Coal Seam Gas Water Management Policy](https://environment.des.qld.gov.au/management/activities/non-mining/water/csg-water) (EHP 2012).

* 1. Hazards and safety

| Environmental objective and outcomes |
| --- |
| The construction and operation of the proposed project must ensure:* the risk of, and the adverse impacts from, natural and man-made hazards are avoided, minimised or mitigated to protect people and property
* the community’s resilience to natural hazards is maintained or enhanced
* the storage and handling of hazardous materials are appropriately located, designed and constructed to minimise health and safety risks to communities and individuals and adverse effects on the environment.
* that any risk associated with explosives use, transportation, storage or manufacture is within an acceptable level, in accordance with the *Explosives Act 1999* and codes and standards including the *Australian Standard AS2187.1* *Explosives - Storage, transport and use - storage*
* the proposed project prevents or minimises the production of hazardous contaminants and waste
* if the production of hazardous contaminants and waste is unavoidable, the proposed project treats and/or contains hazardous contaminants until their disposal at an approved facility.
 |

**Impact assessment**

Assess the vulnerability of the area to natural and induced hazards, including floods, bushfires and cyclones. Consider the relative frequency and magnitude of these events together with the risk they pose to the construction, operation and decommissioning of the proposed project, as well as the rehabilitation of the site. Describe measures that would be taken to minimise the risks of these events.

Describe the potential risks to people and property that may be associated with the proposed project in the form of a risk assessment for all components of the proposed project and in accordance with relevant standards. The assessment must address the following matters:

* The safety of employees during design and planning of the proposed project.
* Potential hazards (including those associated with petroleum and gas pipelines, abandoned mines, explosive magazines and the storage and use of explosives as part of construction), accidents, spillages, fire and abnormal events that may occur during all stages of the proposed project, including estimated probabilities of occurrence.
* Hazard analysis and risk assessment in accordance with:
	+ *AS/NZS ISO 31000:2018 Risk management guidelines* and with *HB203:2006 Environmental risk management principles and processes*
	+ Consider the suite of risk assessments included in the relevant Local Disaster Management Group Plans and the Queensland State Risk Assessments available at https://www.disaster.qld.gov.au/qermf/Pages/Assessment-and-plans.aspx (State heatwave assessment, State Earthquake Risk assessment, Sever Wind Hazard Assessment)
	+ consider the Queensland Government Climate Change science resources https://www.qld.gov.au/environment/climate/climate-change/resources/science including the Queensland Future Climate Dashboard (https://longpaddock.qld.gov.au/qld-future-climate/dashboard)
	+ the [Queensland Emergency Risk Management Framework](https://www.disaster.qld.gov.au/qermf/Pages/Resources.aspx) (Queensland Government 2020) as the endorsed approach to disaster and emergency risk management in Queensland.
* Consider geophysical risk management such as earthquakes. The State Earthquake Risk Assessment includes probabilities of major seismic events for all local government areas and must be used to inform risk consideration and management.
* Address the potential cyclone and severe wind hazard and risk to the project and the heat and heatwave risk management refer to the State Heatwave Risk.
* Demonstrate that any major hazard facility involving dangerous and hazardous materials is appropriately located in accordance with [State Development Assessment Provisions](https://planning.dsdmip.qld.gov.au/planning/better-development/the-development-assessment-process/the-states-role/state-development-assessment-provisions), Code 21, Hazardous chemical facilities (Queensland Government 2020).
* Identify all hazardous substances and any explosives to be used, transported, stored, processed or produced and the rate of usage.
* Evaluate the risks associated with the secure storage, use and transportation of explosives to ensure the risks are within an acceptable standard in accordance with *Australian Standard AS2187.1* *Explosives - Storage, transport and use – storage*.
* Identify the need for appropriate explosive licences and notice of proposed blasting prior to explosives use.
* Potential wildlife hazards, including a development of a mosquito management plan in accordance with Queensland Health guidelines, natural events (e.g. cyclone, storm tide inundation, flooding, bushfire) and implications related to climate change and adaptation.
* Describe natural hazards that may affect the site with at least a 1% annual exceedance probability or 100 year average reoccurrence interval level, including mapping of the potential hazard areas at the site.
* How siting, layout and operation of the development will avoid or mitigate the risks, particularly with regard to the release of hazardous materials during natural hazard events.
* How natural processes and the protective function of landforms and vegetation will be maintained in sea erosion and storm tide inundation areas.
* Provide details on the safeguards that would reduce the likelihood and severity of hazards, consequences and risks to persons, within and adjacent to the proposed project area(s). Identify the residual risk following application of proposed mitigation measures. Present an assessment of the overall acceptability of the impacts of the proposed project in light of the residual uncertainties and risk profile.
* As part of the emergency response plan include:
	+ a bushfire management plan, certified by a suitably qualified person, in consultation with the Queensland Fire and Emergency Services addressing construction and operations, and including the following information at a minimum:
1. a bushfire hazard analysis
2. mitigation strategies to achieve the relevant development outcomes in Part E of the State Planning Policy– Natural Hazards, Risk and Resilience (DILGP 2017)
3. provides details of the proposed ongoing management of fuel loads across the subject site through grazing or mechanical means including the asset protection zone proposed
	* a safety and emergency management plan addressing construction and operations, and including the following information at a minimum:
4. evacuation plans for the construction and operation phases of the development
5. safety management plans and emergency response procedures in consultation with the state and regional emergency service providers (including Queensland Fire and Emergency Services) and provide an adequate level of training to staff who will be tasked with emergency management activities.
* Provide an outline of the proposed integrated emergency management planning procedures, including evacuation plans, if required, for the range of situations identified in the risk assessment developed in this section.
* Outline any consultation undertaken with the relevant emergency management authorities, including the local disaster management group.
	1. Cultural heritage

| Environmental objective and outcomes |
| --- |
| The construction and operation of the proposed project must achieve the purposes of the *Aboriginal Cultural Heritage Act 2003* and the Torres Strait Islander Cultural Heritage Act 2003 with respect to the proposed project site and ensure that the nature and scale of the proposed project does not compromise the cultural heritage significance of a heritage place or heritage area. |

**Impact assessment**

Conduct the impact assessment in accordance with the latest version of the department’s [Aboriginal and Torres Strait Islander cultural heritages—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (ESR/2020/5296) and [Non-Indigenous cultural heritage—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (ESR/2020/5302).

Unless section 86 of the Aboriginal Cultural Heritage Act or Torres Strait Islander Cultural Heritage Act applies, the proponent must develop a Cultural Heritage Management Plan in accordance with the requirements of Part 7 of these Acts.

For non-Indigenous historical heritage, undertake a study of, and describe, the known and potential historical cultural and landscape heritage values of the area potentially affected by the proposed project. Any such study must be conducted by an appropriately qualified cultural heritage practitioner. Provide strategies to mitigate and manage any negative impacts of the proposed project on non-Indigenous cultural heritage values and enhance any positive impacts.

* 1. Social

| Environmental objective and outcomes |
| --- |
| The construction, operation and closure of the proposed project must ensure that:* adverse social impacts arising from the proposed project are avoided or mitigated
* benefits for local and regional communities are enhanced.
 |

**Impact assessment**

Prepare a social impact assessment (SIA) for the proposed project that is consistent with the requirements of the *Strong and Sustainable Resource Communities Act 2017* (SSRC Act) and the Coordinator-General’s [SIA guideline](https://www.statedevelopment.qld.gov.au/coordinator-general/strong-and-sustainable-resource-communities/social-impact-assessment.html) (DSDMIP 2018).

Develop the SIA in consultation with the Office of the Coordinator-General, Department of State Development, Infrastructure, Local Government and Planning.

Include in the SIA detailed assessment of the following five key matters in accordance with the [SIA guideline](https://www.statedevelopment.qld.gov.au/coordinator-general/strong-and-sustainable-resource-communities/social-impact-assessment.html) (DSDMIP 2018):

* community and stakeholder engagement
* workforce management
* housing and accommodation
* local business and industry procurement
* health and community well-being.
	+ 1. Key SIA outcomes

Describe in the SIA:

* the existing social environment of communities that are potentially impacted by the project
* the potential social impacts (both positive and negative) of the project, as well as how they will be managed and monitored
* how the project will contribute to enhancing the sustainability of these communities.

#### Consultation for the SIA

The SIA is to be informed by an inclusive and collaborative community and stakeholder engagement process, consistent with the SIA guideline. Community and stakeholder engagement is to be iterative throughout preparation of the SIA. Engagement with local government must commence at an early stage.

Demonstrate evidence in the SIA of consultation outcomes from key stakeholder groups (refer to Appendix 1 in the [SIA guideline](https://www.statedevelopment.qld.gov.au/coordinator-general/strong-and-sustainable-resource-communities/social-impact-assessment.html)). The SIA must be informed by the results of community and stakeholder engagement.

#### Workforce arrangements

Include in the SIA a workforce profile summary for the construction and operational phases of the project, including the estimated proportion of local and fly-in, fly-out (FIFO) workers. This is to be informed by an analysis of the capacity of towns within 125km radius of the project to:

* provide workers for the construction and operational phases of the project, and
* receive workers and their families who move to the towns
* address barriers that may impact choice for workers to live local.

The SIA will need to include a target for obtaining a local workforce and set the maximum proportion of FIFO workers for the project. This is to be supported by a rationale to ensure local benefit.

Identify in the SIA measures for prioritising the recruitment of workers from local and regional communities. This includes describing how the recruitment hierarchy for workers in section 9(3A) of the SSRC Act will be implemented.

The SIA is to consider the impact of new technologies on the operation of the project including possible impacts on the proposed workforce composition, potential new labour requirements and opportunities for local training and development (where relevant).

Where a FIFO workforce is proposed, identify measures for managing this workforce in accordance with the [SIA guideline](https://www.statedevelopment.qld.gov.au/coordinator-general/strong-and-sustainable-resource-communities/social-impact-assessment.html) (DSDMIP 2018), as well as sections 6 and 8 of the SSRC Act and the relevant provisions in the *Anti-Discrimination Act 1991*.

The information provided in the EIS (including the SIA) will inform the Coordinator-General’s decision under section 12 of the SSRC Act on whether personnel employed during the construction phase of the project should be protected by the SSRC Act’s anti-discrimination and 100 per cent FIFO prohibition provisions.

#### Social impact management plan

Include in the SIA a social impact management plan (SIMP) with management measures to mitigate the impacts and enhance the potential benefits identified in the assessment of the five key matters. The SIMP must describe a practical basis for the implementation of management measures.

The SIMP is to include timeframes for implementation of management measures, key performance indicators, roles and responsibilities, stakeholders and potential partnerships. Potential partnerships include opportunities for linkages with other projects planned or operating in the area and possible alignment with existing strategies or proposed new initiatives that would benefit the management of any cumulative social impacts.

The SIMP must include a process of review throughout the project lifecycle to ensure management measures continue to be effective and, where the stated outcomes are not achieved, are amended to appropriately mitigate impacts.

* 1. Economic

| Environmental objective and outcomes |
| --- |
| The construction and operation of the proposed project must ensure that:* avoid or mitigate adverse economic impacts arising from the proposed project
* capitalise on opportunities potentially available for capable local industries and communities
* create a net economic benefit to the region and state.
 |

**Impact assessment**

Identify the potential adverse and beneficial economic impacts of the proposed project on the local and regional area and the State. Estimate the costs and benefits and economic impacts of the proposal using both regional impact analysis and cost–benefit analysis. Undertake the analysis in accordance with the Coordinator-General’s [Economic impact assessment guideline](https://www.statedevelopment.qld.gov.au/coordinator-general/assessments-and-approvals/economic-impact-assessment) (DSDMIP 2017). Separately address each stage of the proposed project (e.g. construction, operation and decommissioning).

Identify recreational, commercial or indigenous fisheries potentially impacted by the proposed project and undertake consultation with these stakeholders.

Provide an analysis of the economic costs to agricultural activities on land including any impacts to supply chains.

Provide an analysis of the project’s contribution to climate change-related economic and financial risks and benefits to Queensland based on best practice assessment frameworks, such as the Task Force on Climate-related Financial Disclosures (TCFD) framework. This analysis must be based on a scenario consistent with achieving the goals of the Paris Agreement (of which Australia is a signatory) to limit global warming to as close to 1.5°C as possible. Additional scenarios can be included for comparison, however, the central assessment should be aligned with 1.5°C.

Consider the ‘social cost of carbon’ (or other form of carbon cost) in cost benefit analysis for the proposed project. Provide an analysis of the economic costs of developing and implementing GHG measures to meet the 30% reduction on 2005 levels by 2030 target and net zero by 2050 target.

Discuss and quantify the economic costs of scope 3 greenhouse gas emissions.

Discuss potential alternative pricing scenarios for the social cost of carbon for scope 1, 2 and 3 greenhouse gas emissions, including scenarios using the current European Union Emission Allowance Units price (or the price at the time of drafting the revised draft EIS) and futures prices by the European Union.

Discuss costs and risks associated with difficulty securing debt finance, insurance or other financial services, as a result of the divestment policies of major financial institutions.

* 1. Transport

| Environmental objective and outcomes |
| --- |
| The construction and operation of the proposed project must aim to:* maintain the safety and efficiency of all affected transport modes for the proposed project workforce and other transport system users
* avoid and mitigate impacts including those on the condition of transport infrastructure
* ensure any required works are compatible with existing infrastructure and future transport corridors.
 |

**Impact assessment**

The EIS must include a clear summary of the total transport task for the proposed project, including workforce, inputs and outputs, during the construction, operational and decommissioning phases of the proposed project. Proponents must make appropriate choices for modes of transport to ensure efficiency and minimise impacts on the community.

Undertake the impact assessment in accordance with the department’s [Transport—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (DES 2020). The methods used must include the following matters:

* for impacts on roads: a traffic impact assessment report in accordance with the [Guide to traffic impact assessment](https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Guide-to-Traffic-Impact-Assessment) (DTMR 2018), with traffic data in Department of Transport and Main Roads-suitable formats.
* for impacts on rail level crossings: the [Australian Level Crossing Assessment Model](http://alcam.com.au/) (ALCAM 2020).
* for impacts on maritime operations: [Maritime Safety Queensland’s guidance for major development proposals](https://www.msq.qld.gov.au/Waterways/Tidal-works-and-major-development-proposals) *[delete if not relevant]*.

Present the transport assessment for each proposed project-affected mode (road, rail, air, port and sea) as appropriate for each phase of the proposed project. Provide sufficient information to allow an independent assessment of how existing transport infrastructure will be affected by proposed project transport at the local and regional level (e.g. local roads and state-controlled roads).

Discuss how identified impacts will be mitigated for each transport mode. Mitigation strategies may include works, contributions or other strategies that can be documented in a road-use management plan. The strategies must be prepared in close consultation with relevant transport authorities, including local government and the Queensland Police Service. They must consider the transport authorities’ works programs and forward planning, and be in accordance with the relevant methodologies, guidelines and design manuals.

* 1. Matters of National Environmental Significance under the EPBC Act

*[This section applies only where the proponent has received confirmation from the Australian Environment Department that the proposed project is a ‘controlled action’ under the EPBC Act and that it is to be assessed under an EIS accredited under the bilateral agreement. The TOR requirements under the EPBC Act will be provided by Australian Government Environment Department to the proponent if the proposed project was accredited under the bilateral agreement. The requirements must then be inserted as an appendix. Delete it this section if it is not relevant.]*

The EIS must state and address the controlling provisions and describe the particular aspects of the environment leading to the controlled action declaration under the EPBC Act. Enough information about the proposed project and its relevant impacts must be provided to allow the Australian Government’s Environment Minister to make an informed decision whether to approve the proposed project under the EPBC Act.

The assessment of the potential impacts, mitigation measures and any offsets for residual impacts must be dealt with in a stand-alone section of the EIS that fully addresses the matters relevant to the controlling provisions. This must be consistent with the department’s [MNES—EIS information guideline](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis) (ESR/2020/5304) for additional guidance.

Refer to Appendix <insert appendix number> for the complete TOR for MNES under the EPBC Act requirements.

When water resources for a coal seam gas development or large coal mine are a controlling provision, the proposed project’s EIS is referred to the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC). The IESC provides scientific advice to decision makers on potential impacts from CSG and large coal mining developments on Australia's water resources. That typically occurs in time for the IESC’s views to be considered by the administering authority when deciding the suitability of the proposed project and developing conditions for any approval.

1. Commitments

Provide a consolidated description of all the proponent’s commitments to implement avoidance, mitigation, management and design measures (including monitoring programs and management plans) that would need to be applied to meet the predicted project outcomes. Should the proposed project proceed, these commitments would be carried over into conditions as relevant.

1. Conditions

Propose conditions that may be placed on the EA and any other required approvals or licenses. For the EA, conditions may be taken from the department’s [environmental authority conditions](https://www.business.qld.gov.au/running-business/environment/licences-permits/applying/conditions) (DES 2020) including model operating conditions for mining and petroleum activities and/or modified or developed to suit site and project specific issues.

As part of the PRC plan (refer to Section 9.3) provide a PRCP schedule which sets out the milestones and conditions that relate to the completion of progressive rehabilitation and mine closure. The PRC plan must be consistent with the department’s guideline [Progressive rehabilitation and closure plans](https://environment.des.qld.gov.au/__data/assets/pdf_file/0026/95444/rs-gl-prc-plan.pdf) (ESR/2019/4964)

1. Appendices to the EIS

Appendices to the EIS must include the technical data collected, and evidence used to develop assertions and findings in the main text of the EIS.

No significant issue or matter, including statements of uncertainty associated with assertions and findings, should be mentioned for the first time in an appendix—it must be addressed in the main text of the EIS.

Include a table listing the section and sub-sections of the EIS where each requirement of the TOR is addressed.

1. Spatial and electronic data presentation

Maps included in the EIS must have contours at suitable increments relevant to the scale, location, potential impacts and type of proposed project, shown with respect to Australian Height Datum (AHD) and drafted to Geocentric Datum of Australia 2020 (GDA2020). In relatively flat locations, contours must be at one metre intervals. Present geographical coordinates as latitude and longitude against the GDA2020.

Provide spatial data presented in the EIS to the department in appropriate electronic form, such as shape files. This includes all water quality, wastewater quality data and geological structures, such as aquifers, faults and economic resources. Refer to the department’s guideline [Spatial information submission](https://environment.des.qld.gov.au/__data/assets/pdf_file/0027/90288/rs-gl-spatial-information.pdf) (ESR/2018/4337) for information on the format for spatial information.

*[delete if not relevant]* For rehabilitation matters, provide spatial information in accordance with the department’s guideline [Progressive rehabilitation and closure plans](https://environment.des.qld.gov.au/__data/assets/pdf_file/0026/95444/rs-gl-prc-plan.pdf) (ESR/2019/4964) and the department’s application form [Submission of a progressive rehabilitation and closure plan](https://www.business.qld.gov.au/running-business/environment/licences-permits/rehabilitation/progressive-rehabilitation-closure-plans) (ESR/2019/4957).

# Appendix 1 Glossary

*[Update this section with any additional terms used in the text and remove terms not used.]*

The following acronyms, initialisms and abbreviations have been used in this document.

| Acronym/abbreviation | Definition |
| --- | --- |
| AHD | Australian Height Datum |
| Bilateral agreement | an agreement between the Australian Government and the State of Queensland under section 45 of the *Environment Protection and Biodiversity Conservation Act 1999* relating to environmental assessment |
| CSG | coal seam gas |
| CMU | cumulative management area |
| Department | the Queensland Department of Environment and Science |
| EA | environmental authority |
| EIS | environmental impact statement |
| EPBC Act | *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) |
| ERA | environmentally relevant activity |
| FIFO | fly-in-fly-out |
| GDA2020 | Geocentric Datum of Australia 2020 |
| GHG | Greenhouse gases |
| IESC | Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development |
| MNES | matters of national environmental significance |
| MSES | matters of state environmental significance |
| NGER Act | *National Greenhouse Energy Reporting Scheme Act* |
| Proposed PRC plan | proposed progressive rehabilitation and closure plan |
| Proposed PRCP schedule | proposed progressive rehabilitation and closure plan schedule |
| SIA | social impact assessment |
| SSRC Act | *Strong and Sustainable Resource Communities Act 2017* |
| TOR | terms of reference |

# Appendix 2 Policies, guidelines and references

Note: These references were correct at the time of publication. Where more recent versions are available, these must be used.For all Department of Environment and Science publications, the latest version of a publication can be found by using the publication number as a search term at the [Queensland Government website](http://www.qld.gov.au/) [www.qld.gov.au](http://www.qld.gov.au)

ANZG 2018, *Australian and New Zealand guidelines for fresh and marine water quality*, Australian and New Zealand Governments and Australian state and territory governments, Canberra, Australian Capital Territory, viewed April 2020, [www.waterquality.gov.au/anz-guidelines](http://www.waterquality.gov.au/anz-guidelines)

*[The following list, provides an overview of policies, guidelines and references referred to in the text above; however this is not exhaustive. At the time of submission each reference must be reviewed with regard to its currency and relevance for the specific requirements of your project’s EIS and the list updated prior to the submission of the draft TOR to the department]*

Australian Level Crossing Assessment Model, viewed March 2022, <http://alcam.com.au/documentation.aspx>.

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Department of Environment and Science 2019, [*The environmental impact statement process for resource projects under the* Environmental Protection Act 1994](https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/does-my-project-need-an-eis), ESR/2016/2167, Queensland Government, Brisbane, Queensland, viewed March 2022, <https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/does-my-project-need-an-eis>

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Department of Environment and Science 2020, *Aquatic ecology*—*EIS information guidelines*, ESR/2020/5295, Queensland Government, Brisbane, Queensland, viewed March 2022, <https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis>

Department of Environment and Science 2020, *Aboriginal and Torres Strait Islander cultural heritages*—*EIS information guidelines*, ESR/2020/5296, Queensland Government, Brisbane, Queensland, viewed March 2022, <https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis>

Department of Environment and Science 2020, *Biosecurity*—*EIS information guidelines*, ESR/2020/5297, Queensland Government, Brisbane, Queensland, viewed March 2022, <https://www.qld.gov.au/environment/pollution/management/eis-process/about-the-eis-process/developing-an-eis>

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Appendix 3 Terms of reference for matters of national environmental significance (MNES) under the *Environment Protection and Biodiversity Conservation Act 1999* requirements

*[Delete this Appendix if not relevant]*

The proposed project was referred on <insert date> to the Australian Government (*<insert referral number>*). On *<insert date>*, the Australian Government determined the proposed project to be a controlled action under the Commonwealth EPBC Act.

The controlling provisions are:

* *<insert controlling provisions>*

The proposed project will be assessed under the bilateral agreement between the Commonwealth and the State of Queensland (section 45 of the EPBC Act) using the EIS prepared under the EP Act. The TOR should be addressed by the proponent in a stand-alone section that primarily focuses on the MNES listed above. This section (henceforth called the ‘MNES section’) should contain sufficient information to be read alone with reference to technical data or supplementary reports where appropriate. Any detailed technical information to support the text in the MNES section should be included as appendices to the draft EIS.

*[Insert terms of reference for MNES under the EPBC Act requirements. This is provided by the Commonwealth Environment Department for each project. Contact the department’s Environmental Impact Assessment team via email at* *eis@des.qld.gov.au* *to request it for your project.]*

1. This is the publication number which can be used as a search term to find the latest version of a publication at www.qld.gov.au. [↑](#footnote-ref-2)